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ABSTRACT

The basic objective of this study was to determine the educational and occupational aspirations of Virginia's high school seniors. In May, 1967, all high school seniors in Virginia were asked to complete a survey form. Replies were received from about 95% of the students. The preliminary data obtained was considered Phase I and the comprehensive analysis which followed as Phase II. Phase III consisted of further study of three areas not covered in the previous parts. The results, including tables of data are given for each phase. The data in phase I is analyzed question by question. Results included in Phase II show: (1) differences in future plans between boys in private versus boys in public schools; (2) differences associated with sex; (3) differences associated with college-non college classification. Recommendations for further study include: (1) additional study and analysis of the 1967 survey, and (2) replication of the study in May, 1970. (KJ)

N.SG

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A STUDY
EDUCATIONAL
CCUPATIONAL
ASPIRATIONS
OF VIRGINIA'S
HOOL SENIORS

ENT OF EDUCATION • RICHMOND, VIRGINIA • JULY 1969

CG004 884

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A STUDY OF EDUCATIONAL AND OCCUPATIONAL ASPIRATIONS OF VIRGINIA'S 1966-67 HIGH SCHOOL SENIORS

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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Division of Educational Research and Statistics
State Department of Education
Richmond, Virginia 23216

July, 1969

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FOREWORD

As one of its major responsibilities, the Division of Educational Research and Statistics of the State Department of Education cooperates in the development of studies to find solutions to educational problems. Studies are conducted by persons in local school systems, at institutions of higher education, by members of the Division of Educational Research and Statistics and other divisions of the Department of Education.

The study reported here was conducted by the Division of Educational Research and Statistics in cooperation with the Guidance Service of the Division of Special Services and the public and private high schools in Virginia. Many persons in local school systems, the State Department of Education, institutions of higher education, and other education agencies contributed to the success of the project. Dr. Charles L. Bertram, who at the time was supervisor of educational research for the Department of Education, and Dr. Jeffrey A. Pyatte, assistant professor of education at the University of Virginia, with the assistance of staff members of the Division of Educational Research and Statistics, formulated the procedures for analyzing the mass of data collected in the survey and prepared the multiple linear regression procedures for Phase II of the study. Mr. Robert E. Stoltz, regional director, Mr. Daniel Beshara, assistant director, College Entrance Examination Board, and Dr. Milton D. Jacobson, director of the Bureau of Educational Research of the University of Virginia, served as consultants.

The basic objective of the study was to determine the educational and occupational aspirations of Virginia's high school seniors. The primary purpose in setting this objective was to provide guidance and curriculum specialists, school administrators, and higher education faculties with information useful in planning more effective educational programs. The study also should be of value on a broader scale to persons interested in planning for Virginia's human resources.

The report that follows is presented in the hope that it will contribute to the continuing improvement of education in Virginia.

Charles E. Clear, *Director*
Division of Educational Research and Statistics

I. INTRODUCTION

At a conference on education called by the Governor of Virginia in the fall of 1966, and followed in the winter and spring of 1967 by ten regional conferences, concern was expressed about the low percentage of Virginia's college-age population[1] enrolled in college. The figures cited in these conferences were taken from a Southern Regional Education Board publication[2] which indicated that 27.1 percent of Virginia's college-age population was enrolled in college in 1965, whereas the percentage for the South as a whole was 35.1 percent and the national average was 47.1 percent.

This concern, coupled with the desire by the State Department of Education to know more about future plans of seniors and the factors influencing these plans, resulted in the formulation of a survey, which is believed to be the first of its kind undertaken in Virginia. At the request of the State Superintendent of Public Instruction, the staff of the Division of Educational Research and Statistics developed the procedures and forms necessary to answer the question, "What were the educational and occupational aspirations of Virginia's 1967 high school seniors?" The steps taken to answer this question are given in flow chart format in Appendix C.

In May 1967 all high school seniors in Virginia were requested to complete the survey form prepared and distributed by the Division of Educational Research and Statistics. The form[3] was designed with the assistance of staff members of the Department of Education and specialists from the Educational Testing Service.

Replies were received from 52,620 students representing approximately 95 percent of the State's high school senior population. An analysis was conducted using the IBM 1440 at the Division of Educational Research and Statistics in order to provide preliminary data as soon as practicable and to obtain guidelines for further study. Answer frequencies of public and private school seniors were the primary results of this analysis. The preliminary data obtained from 49,466 public high school seniors were reported in the fall of 1967 issue of *Public Education in Virginia*.[4] This part of the project was considered as Phase I and the comprehensive analysis which followed as Phase II. A detailed statistical analysis of the data was planned so that information of a generalized nature might be obtained.

This analysis, however, required more staff time and funds than were available to the Division of Educational Research and Statistics. Beginning in February of 1968, the College Entrance Examination Board (CEEB) provided funds for employment of resource personnel to assist the Division of Educational Research and Statistics in (1) determining the questions to be analyzed, (2) organizing the data for computer analysis, and (3) preparing a publication giving the results of the additional statistical analyses.

The number of areas which could have been investigated was large and the selection of those to be pursued was quite important. Three areas were selected for further investigation in Phase II. The first area was determined by the question, "What were the differences in the backgrounds and aspirations of public school and private school seniors, of male and female seniors, and of those seniors who planned to attend college and those who did not?" The second area was determined by the question, "Who did the seniors report as having the most influence on their post-high school plans?" and the third area was determined by the question, "How did the background and high school achievement of those seniors who applied to at least one college but reported that they probably would not attend college compare with that of those seniors who definitely planned to attend college?"

Because of its versatility, the applied multiple linear regression technique[5] was used to analyze the data. To make use of this approach, data from the Senior Survey forms were arranged in the tape format[6] required by the Burroughs 5500 computer program at the University of Virginia, Charlottesville[7, 8]. The different procedures used for the survey are explained in this publication in order that the study might be replicated in Virginia as well as by other states or organizations as desired. A technical discussion of the multivariate regression analysis used with the Senior Survey data is given in Appendix F. In addition, the various models used in performing particular analyses are described in Appendixes G, H, and I.

The results of Phase I of the survey are summarized in the following section. Answers to questions such as, "How many (or what percent) of the seniors did not plan to attend college because it was considered too expensive?" can be derived from these data summaries.

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[1] College-age population: 18 to 21 year olds, E. F. Schietinger, *Fact Book on Higher Education in the South*, 1965, Southern Regional Education Board, Atlanta, Georgia, 1965.

[2] *Ibid.*

[3] Appendix A.

[4] "Senior Survey," *Public Education in Virginia* (Fall, 1967), State Department of Education, Richmond, Virginia 23216, pp. 1-7.

[5] See Robert A. Bottenberg, *et al.*, *Applied Multiple Linear Regression*, Technical Documentary Report PRL-TDR-63-6. (Lackland Air Force Base, Texas. Available from Clearinghouse for Federal Scientific and Technical Information, 1963.)

[6] Magnetic Tape, 7 track, 556 b.p.i. See Appendix E for format.

[7] Burroughs 5500 computer programs for Applied Multiple Linear Regression are available.

[8] Because a few records were deleted in the transfer, numbers reported in Phase II are not in complete agreement with those in Phase I. Differences are small, however.

The results of Phase II follow in Section III and they include statistics such as means and standard deviations as well as the regression analyses. The answers to questions such as, "What differences among boys and girls were associated with whether or not they planned to attend college?" may be found in this section.

II. PHASE I OF THE SENIOR SURVEY

All public and private high schools in the State were invited to participate in the survey. Three hundred forty-seven (98.9 percent) of the 351 public high schools with senior classes and 62 (95.4 percent) of the 65 private high schools contacted responded to the survey.

Senior Survey forms were returned for 49,466 public school seniors and for 3,154 private school seniors. Approximately 57 percent (28,106) of the public high school seniors and 85 percent (2,723) of the private school seniors said they planned to continue their formal education immediately after graduation.

Part A of this section is a report of the responses from public school seniors. Part B covers the corresponding data from private school seniors.

PART A

Frequencies of Answers Given by Public High School Seniors

The frequencies of answers which the public school seniors gave to various questions asked on the survey form are presented in this section. For the readers' convenience, the questions from the Senior Survey form are given near the appropriate tables.

Plans After Graduation—Question 1

As the data in Table 1 show, 17,743 (35.88 percent) public high school seniors planned to attend a four-year college. Another 3,615 (7.31 percent) planned to enroll in academic programs at junior or community colleges and 1,760 (3.56 percent) would enroll in vocational or technical programs at these colleges.[1]

1. What Are Your Plans After Graduation? (Mark One)

☐ **Job and Go to School Part-Time**
☐ **Full-Time Job**
☐ **Business, Trade, or Technical School**
☐ **Four Year College**
☐ **Academic Program at a Junior or Community College**
☐ **Vocational or Technical Program at a Junior or Community College**
☐ **Housewife**
☐ **Military Service**
☐ **Other**
☐ **No Definite Plans Right Now**

Continuing their education in business, trade, or technical schools would be 4,988 (10.08 percent) seniors. Therefore, 56.82 percent of the public school seniors planned to continue their education on a full-time basis after high school graduation. If those students who selected "work and part-time school" and "military service" as their post-high school plans are included, 70.08 percent of the seniors planned to continue their education in some way.

As noted above, 56.82 percent of the seniors planned full-time pursuit of studies. These figures seem to differ from those reported in the Southern Regional Education Board's publication.[2] One possible reason for the difference is that the Senior Survey included seniors who planned to attend different kinds of colleges and many of these may attend college for only one or two years. Another reason for the difference between the Senior Survey and SREB results is that the SREB report was based on the college-age population of 1965, whereas the Senior Survey was based on seniors of the 1966-67 school year who would be included in the college-age population from June or September of 1967 to June of 1972.

Of the 14,289 seniors (28.9 percent) who planned to work after graduation, 10,646 (21.52 percent) said they would seek full-time employment. The seniors who planned to combine work with part-time schooling comprised 7.36 percent (3,643) of the population.

Some important differences in the plans of boys and girls are reported in Table 1. Almost twice as many girls as boys planned to accept full-time jobs and more boys than girls planned to enter a community college (13.82 percent to 8.18 percent). Of the boys, 11.54 percent planned to enter military service and 3.40 percent of the girls expected to become housewives. Only 5.20 percent of the boys and 4.12 percent of the girls had no definite plans.

Source of Assistance With Decision on Plans After High School—Question 2

As might be expected, the public school seniors felt that they received more help from parents or relatives

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[1] The two-year community college movement is a recent development in the educational history of Virginia. The first community college was organized in 1966 and there are now eight of them located in strategic locations around the State. In addition, a total of 22 community colleges are planned. In spite of the recency of the community college movement, 10.87 percent of the public school seniors planned to enroll in one of these institutions.

[2] E. F. Schietinger, *Fact Book on Higher Education in the South*, 1965, Southern Regional Education Board, Atlanta, Georgia.

TABLE 1

Public High School Seniors' Plans After Graduation

	Boys		Girls		Total	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Work and Part-Time School	1,560	6.62	2,083	8.04	3,643	7.36
Full-Time Job	3,663	15.55	6,983	26.94	10,646	21.52
Business, Trade, or Technical School	2,001	8.49	2,987	11.53	4,988	10.08
Four-Year College	8,779	37.27	8,964	34.60	17,743	35.88
Academic Program at Junior or Community College	2,201	9.34	1,414	5.46	3,615	7.31
Vocational or Technical Program at Junior or Community College	1,055	4.48	705	2.72	1,760	3.56
Housewife	4	.02	882	3.40	886	1.79
Military Service	2,718	11.54	201	.78	2,919	5.90
Other	305	1.29	549	2.12	854	1.73
No Definite Plans	1,224	5.20	1,068	4.12	2,292	4.63
No Response	46	.20	74	.29	120	.24
TOTAL	23,556	100.00	25,910	100.00	49,466	100.00

TABLE 2

Source of Assistance with Decision on Plans After High School—Public High School Seniors

	Very Much				Some				Very Little or None				No Response			
	Boys		Girls		Boys		Girls		Boys		Girls		Boys		Girls	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Parents or Relatives	10,328	43.84	12,427	47.96	9,462	40.17	10,418	40.21	3,378	14.34	2,773	10.70	388	1.65	292	1.13
High School Teachers	2,724	11.56	3,161	12.20	8,832	37.49	10,277	39.66	11,091	47.08	11,647	44.95	909	3.86	825	3.18
High School Counselor	4,444	18.87	4,345	16.77	8,867	37.64	9,724	37.53	9,402	39.91	11,044	42.62	843	3.58	797	3.08
High School Principal	684	2.90	535	2.06	2,747	11.66	2,527	9.75	19,045	80.85	21,859	84.37	1,080	4.58	989	3.82
College Students	1,859	7.89	2,136	8.24	5,430	23.05	6,204	23.94	15,078	64.01	16,431	63.42	1,189	5.05	1,139	4.40
Classmates or Friends	2,724	11.56	3,391	13.09	10,117	42.95	12,072	46.59	9,802	41.61	9,584	36.99	913	3.88	863	3.33
Other Adults	3,409	14.47	3,648	14.08	9,714	41.24	10,771	41.57	9,412	39.96	10,497	40.51	1,021	4.33	994	3.84

than from any of the other persons shown in Table 2 in making their decisions concerning post-high school plans.[1] They were followed in degree of help by counselors, other adults, classmates or friends, teachers, college students, and principals in this order. Other studies (discussed in Section III) indicate that the way in which this question was asked influenced the relative number of responses in each category. For example, one of the functions of guidance counselors is to provide information to help parents and students make informed decisions about colleges; counselors would most likely be rated higher by the students if the question had emphasized the source of information rather than the source of help.

2. To What Extent Did the Following Persons Help You in Deciding on Your Plans After High School?

Very Much	Some	Very Little or None	(Mark One Response For Each Item)
☐	☐	☐	Parent or Other Relative
☐	☐	☐	High School Teachers
☐	☐	☐	High School Counselor
☐	☐	☐	High School Principal
☐	☐	☐	Students on College Campus
☐	☐	☐	Classmates or Friends
☐	☐	☐	Other Adults

Part B of Section III is a report of the analysis performed on the data from Question 2. Of particular interest were patterns of influence that began to appear. For example, students who were helped by parents tended also to have been helped by counselors,[2] classmates, and friends. Those who were helped "very much" by high school teachers tended also to have been helped by counselors and principals. The characteristics of these particular groups were not identified.

Reasons for Not Attending College—Question 3

The students were given a choice of various reasons for having no college plans (Table 3). These included lack of interest, military service, marriage, employment, attitude of parents, low academic achievement, and expense. Only 9.9 percent of the seniors not attending college, however, said expense was the deterrent.

One cannot help but wonder why more girls (11.20 percent) than boys (8.43 percent) gave "too expensive" as the reason for not attending college. The difference is fairly small, but a study of the differences in

3. If You Are Not Definitely Planning To Go To College, What is the One Most Likely Reason? (Mark One)

☐ It is Too Expensive
☐ My Grades Are Not Good Enough
☐ My Parents Don't Believe I Should
☐ I'd Rather Get a Job
☐ I'd Rather Get Married
☐ Military Service
☐ Lack of Interest
☐ I Do Not Know

TABLE 3

FREQUENCIES OF REASONS GIVEN BY PUBLIC HIGH SCHOOL SENIORS FOR NOT ATTENDING COLLEGE

	BOYS		GIRLS		TOTAL	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Too Expensive	904	8.43	1,425	11.20	2,329	9.93
Grades Not Good Enough	3,332	31.04	2,517	19.78	5,849	24.93
Parents Don't Believe I Should	40	.37	146	1.14	186	.79
Rather Get a Job	1,473	13.71	4,247	33.38	5,720	24.38
Rather Get Married	174	1.62	1,191	9.36	1,365	5.82
Military Service	2,248	20.94	151	1.18	2,399	10.23
Lack of Interest	1,354	12.62	1,599	12.57	2,953	12.59
Do Not Know	1,209	11.27	1,449	11.39	2,658	11.33
TOTAL	10,734	100.00	12,725	100.00	23,459	100.00

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[1] Similar findings were reported in ***Beyond High School***, James W. Trent and Leland L. Medsker, Center for Research and Development in Higher Education, University of California, Berkeley, California.

[2] ***Ibid.***

parental attitudes toward boys attending college and girls attending college might prove interesting. The same trend in favor of boys attending college was observed in the relative number (0.37 percent) who reported "my parents don't believe I should" as the reason for not attending college.

Many more boys (31.04 percent) than girls (19.78 percent) gave "grades not good enough" as the reason for not attending college. A later analysis (Table 30) indicated that the public school boys not planning to attend college had an average grade-rank of the thirty-seventh percentile and girls not planning to attend college had a higher average grade-rank of the forty-eighth percentile. In other words, boys did have lower grades than girls.

Over twice as many girls (33.38 percent) as boys (13.71 percent) said that they had rather get a job than go to college. It would be interesting to see what percentage of this group of boys and girls had above average scholastic aptitude and what percentage had adequate preparation for an entry job.

More girls (9.36 percent) than boys (1.62 percent) indicated that they would rather get married than go to college. More girls reported that they had rather get married (1,191) than those who said they wanted to be housewives (882). As expected, more boys (20.94 percent) than girls (1.18 percent) gave military service as a reason for not entering college.

As the data in Tables 1 and 3 are studied, one cannot help but be impressed with the different expectations which society seems to have for boys and girls pertaining to college and the world of work. It would be interesting to study the differences in attitudes among socio-educational groups and among parents from different geographical areas of the State. Of course, Table 3 refers only to those seniors who did not plan to attend college.

Time of Decision on Post-High School Plans—Question 4

Table 4 reflects the frequency of answers to the question, "When did you decide on what you want to do after high school?" Almost 54 percent of the seniors indicated that they reached decisions about their future plans during the last two years of high school. It is also noted, however, that 53 percent of the pupils made their decisions before the senior year. This would tend to confirm the belief that a career decision is a developmental process. There are only slight differences between boys and girls with the possible exception that more of the boys (8.50 percent) than girls (5.32 percent) had not decided in late May of their senior year what they would do the following year.

4. When Did You Decide on What You Want to Do after High School?
(Mark One)
I Have Not Decided Yet
Just This Year
In the 11th Grade
In the 9th or 10th Grade
In the 7th or 8th Grade
Before the 7th Grade
I Do Not Know

TABLE 4

TIME OF PUBLIC HIGH SCHOOL SENIORS' DECISIONS ON WHAT TO DO AFTER HIGH SCHOOL

	BOYS		GIRLS		TOTAL	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Have Not Decided Yet	2,003	8.50	1,378	5.32	3,381	6.83
Just This Year	8,302	35.25	8,409	32.46	16,711	33.79
In 11th Grade	4,618	19.60	5,292	20.42	9,910	20.03
In 9th or 10th Grade	3,121	13.25	4,136	15.96	7,257	14.67
In 7th or 8th Grade	1,475	6.26	2,019	7.79	3,494	7.06
Before 7th Grade	2,389	10.14	3,357	12.96	5,746	11.62
Do Not Know	1,559	6.62	1,219	4.70	2,778	5.62
No Reponse	89	.38	100	.39	189	.38
TOTAL	23,556	100.00	25,910	100.00	49,466	100.00

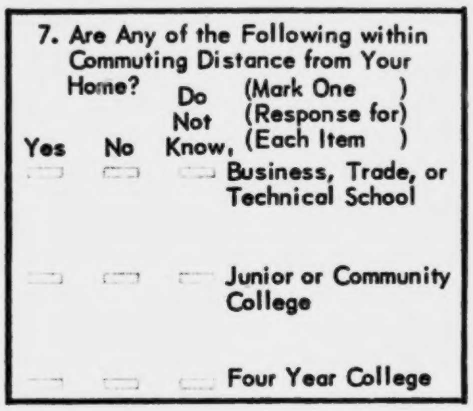
The data reported in Table 4 have implications for high school and possibly junior high or intermediate school counseling. One-third of the seniors had decided on post-high school plans before entering the eleventh grade. Analyses reported in Part A of Section III indicated that students who completed post-high school plans earlier in their careers tended to enter college and be younger than those who completed plans later. This segment of students may have counseling needs different from the 52.82 percent who decided on post-high school plans during their last two years of high school. Correlation coefficients reported in Section III indicated that the students deciding on post-high school plans earlier in their careers tended to rank toward the top of their classes and to aspire toward higher levels on the occupational scale.

For the 33.8 percent making their decision in their senior year, it would be interesting to see what their plans were and how this group differed from the others.

Commuting Distance from Colleges and Technical Schools —Question 7

In the public schools, 78.40 percent of the boys and 80.47 percent of the girls reported that they lived within commuting distance of a four-year college. These data are presented in Table 6.

Similarly, almost 80 percent of the students lived within commuting distance of a junior or community college and about 86 percent of the seniors lived within commuting distance of a business, trade, or technical school. No attempt was made to determine if the same students lived near all three. It is possible therefore that almost 20 percent of the students did not live within commuting distance of any type of college.



7. Are Any of the Following within Commuting Distance from Your Home? (Mark One Response for Each Item)

Yes	No	Do Not Know,	
☐	☐	☐	Business, Trade, or Technical School
☐	☐	☐	Junior or Community College
☐	☐	☐	Four Year College

TABLE 5

AGE DISTRIBUTION OF VIRGINIA'S 1967 PUBLIC HIGH SCHOOL SENIORS

	BOYS		GIRLS		TOTAL	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
16 or Under	65	.28	134	.52	199	.40
17	6,870	29.16	9,759	37.66	16,629	33.62
18	11,720	49.76	13,189	50.90	24,909	50.35
19	3,489	14.81	2,003	7.73	5,492	11.10
20 or Over	1,127	4.78	504	1.95	1,631	3.30
No Response	285	1.21	321	1.24	606	1.23
TOTAL	23,556	100.00	25,910	100.00	49,466	100.00

Age Distribution of Seniors—Question 6

As indicated in Table 5, the public school seniors who responded to the survey included 23,556 boys and 25,910 girls. Slightly more than half of the seniors reported that they were 18 years of age. The percentages in the different categories as well as later analysis indicated that senior boys were older than senior girls. For example, approximately 38 percent of the girls and 29 percent of the boys were 17 years old, while eight percent of the girls and 15 percent of the boys were 19 years old as of May, 1967.

6. – Your Age –

16 or Under	17	18	19	20 or Over
☐	☐	☐	☐	☐

Educational Level of Parents—Question 8

Table 7 indicates the level of education achieved by parents as reported by the seniors. The frequency distributions show that 20,677 (41.82 percent) of the fathers and 18,138 (36.6 percent) of the mothers did not graduate from high school. Fathers who completed graduate school outnumbered the mothers 3,185 to 912, and the number of fathers graduating from college or receiving some college, technical, or special training was nearly equal to the number of mothers. The sen-

TABLE 6

NUMBER OF PUBLIC SCHOOL SENIORS LIVING WITHIN COMMUTING DISTANCE OF COLLEGES AND TECHNICAL SCHOOLS

	YES				NO				DO NOT KNOW				NO RESPONSE			
	Boys		Girls		Boys		Girls		Boys		Girls		Boys		Girls	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Business, Trade or Technical School	20,021	84.99	22,609	87.26	1,763	7.48	1,870	7.22	1,134	4.81	833	3.21	638	2.71	598	2.31
Junior or Community College	18,611	79.01	20,421	78.82	2,726	11.57	3,007	11.61	1,278	5.43	1,380	5.33	941	3.99	1,102	4.25
Four-Year College	18,468	78.40	20,850	80.47	3,055	12.97	3,053	11.78	1,009	4.28	896	3.46	1,024	4.35	1,111	4.29

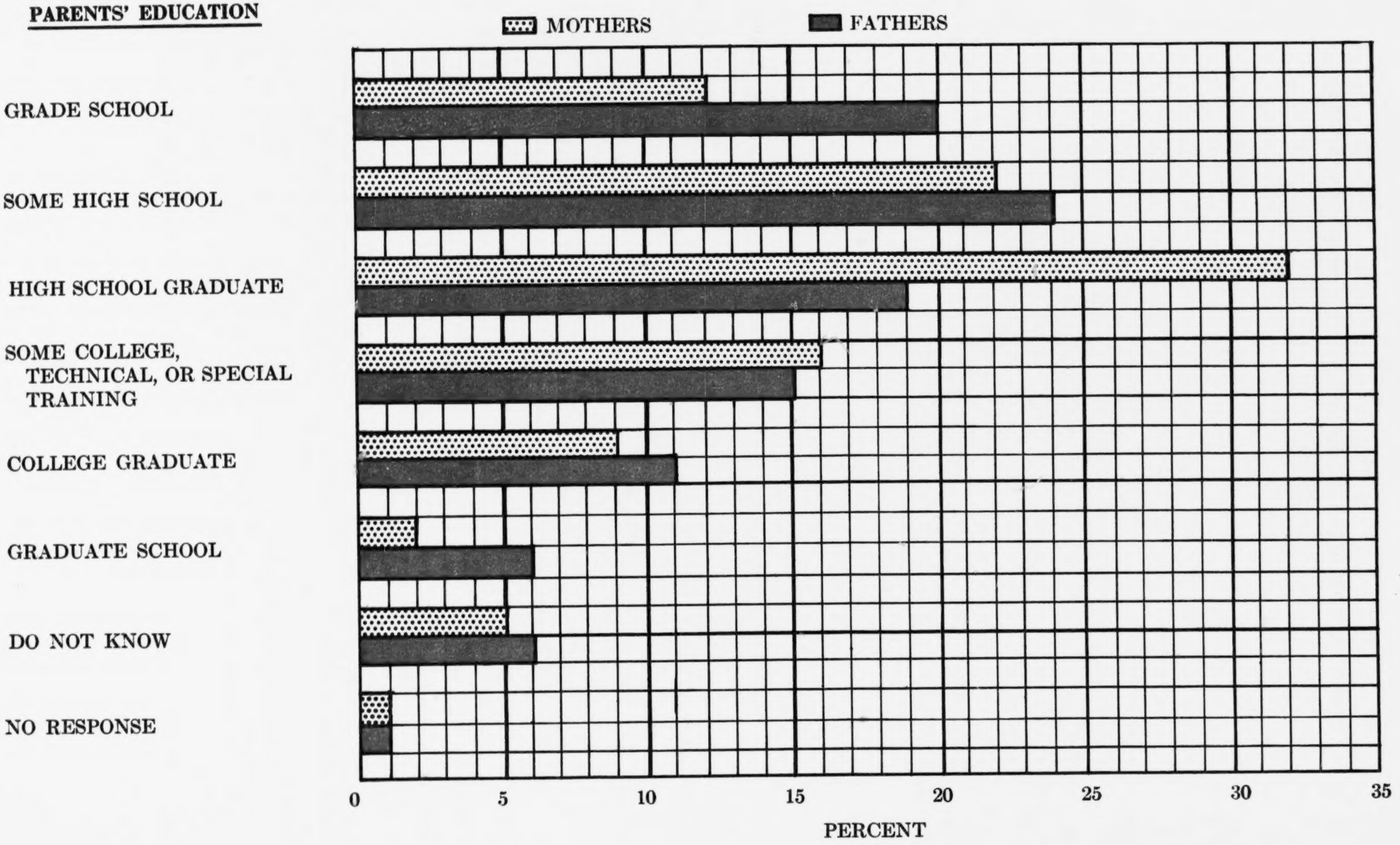
TABLE 7

EDUCATIONAL LEVEL OF PARENTS AS REPORTED BY PUBLIC HIGH SCHOOL SENIORS

	FATHER				MOTHER			
	Boys		Girls		Boys		Girls	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Grade School	4,408	18.71	5,426	20.94	2,642	11.22	3,440	13.28
Some High School	5,189	22.04	5,654	21.83	5,472	23.23	6,584	25.41
Finished High School	4,646	19.72	4,672	18.03	8,014	34.02	7,910	30.54
Some College, Technical, or Special Training	3,419	14.51	3,777	14.58	3,556	15.10	4,395	16.96
Graduated From College	2,528	10.73	2,675	10.32	2,195	9.32	2,065	7.97
Graduate School	1,588	6.74	1,597	6.16	442	1.88	470	1.81
Do Not Know	1,480	6.28	1,726	6.66	1,089	4.62	882	3.40
No Response	298	1.27	383	1.48	146	.62	164	.63
TOTAL	23,566	100.00	25,910	100.00	23,556	100.00	25,910	100.00

GRAPH I

HOW FAR DID YOUR PARENTS GO IN SCHOOL?



8. How Far Did Your Parents Go In School?
(Mark One In Each Column)

Father	Mother	
☐	☐	Grade School
☐	☐	Some High School
☐	☐	Finished High School
☐	☐	Some College, Technical or Special Training
☐	☐	Graduated from College
☐	☐	Graduate School
☐	☐	I Do Not Know

iors indicated, however, that of those who only finished high school, the mothers outnumbered the fathers 15,924 to 9,318 (32.19 percent to 18.84 percent).

Later analysis (Table 30) indicated that the fathers of both boys and girls who planned to attend college tended to have more formal education than did their mothers. The mothers of both boys and girls who did *not* plan to attend college tended to have more formal education than did their fathers. In general, both parents of seniors who planned to enter college tended to have considerably more formal education than the parents of seniors who did not plan to enter college.

Type of High School Program—Question 9

Table 8 shows that 21,494 (43.45 percent) seniors had been enrolled in a college preparatory program in high school. This number was almost equally divided between boys and girls. The group of 14,215 (28.74 percent) seniors who were enrolled in a general high school program was composed of 8,108 (34.42 percent) boys and 6,107 (23.57 percent) girls. Of the seniors taking commercial or business courses, the girls outnumbered the boys 6,867 to 1,459. Vocational programs were taken by 12.33 percent of the boys and 6.57 percent of the girls.

9. Which One of the Following High School Programs Have You Taken?

(Mark One Most Like Your Program)

☐ Commercial or Business
☐ College Preparatory
☐ General
☐ Vocational
☐ Other

Occupation of Parents and Occupational Plans of Seniors —Question 10

Students were limited to one response for each part of the question concerning the occupations of their parents and their own occupational plans.

The differences in the occupational aspirations of the seniors and the occupations of their parents may be compared by using the data presented in Table 9.

TABLE 8

TYPES OF HIGH SCHOOL PROGRAMS TAKEN BY PUBLIC SCHOOL SENIORS

	BOYS		GIRLS		TOTAL	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Commercial or Business	1,459	6.19	6,867	26.50	8,326	16.83
College Preparatory	10,616	45.07	10,878	41.98	21,494	43.45
General	8,108	34.42	6,107	23.57	14,215	28.74
Vocational	2,905	12.33	1,702	6.57	4,607	9.31
Other	292	1.24	173	.67	465	.94
No Response	176	.75	183	.71	359	.73
TOTAL	23,566	100.00	25,910	100.00	49,466	100.00

TABLE 9

Occupations of Parents and Occupational Plans of Public High School Seniors

	Father				Mother				You Want To Be			
	Boys		Girls		Boys		Girls		Boys		Girls	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Workman	3,186	13.52	3,587	13.84	686	2.91	666	2.57	314	1.33	64	.25
Service Worker	1,299	5.51	1,464	5.65	1,855	7.87	2,443	9.43	497	2.11	1,442	5.57
Machine Operator	2,035	8.64	2,648	10.22	801	3.40	1,206	4.65	956	4.06	285	1.10
Skilled Craftsman or Foreman	4,543	19.28	5,347	20.63	232	.98	235	.91	3,107	13.19	100	.39
Salesman or Agent	1,446	6.14	1,481	5.72	862	3.66	1,147	4.43	357	1.52	318	1.23
Office Worker	1,006	4.27	1,000	3.86	2,906	12.34	3,232	12.47	881	3.74	8,571	33.07
Farm Owner or Manager	1,040	4.42	1,086	4.19	34	.14	36	.14	269	1.14	34	.13
Owner of Business	1,514	6.43	1,541	5.95	274	1.16	281	1.08	883	3.75	191	.74
Technician	529	2.25	441	1.70	407	1.73	598	2.31	1,751	7.43	1,752	6.76
Artist, Entertainer or Athlete	63	.27	57	.22	87	.37	95	.37	1,321	5.61	1,207	4.66
Elected or Appointed Official	152	.65	152	.59	26	.11	21	.08	145	.62	102	.39
Manager or Executive	3,051	12.94	3,106	11.99	201	.85	218	.84	1,710	7.26	247	.95
Profession –A–	1,721	7.31	1,815	7.01	1,160	4.92	1,242	4.79	4,216	17.90	6,062	23.39
Profession –B–	746	3.17	700	2.70	159	.67	119	.46	3,008	12.77	1,186	4.58
Housewife—No Other Employment	25	.11	16	.06	12,624	53.62	13,360	51.56	116	.49	859	3.32
Do Not Know	497	2.11	688	2.66	370	1.57	336	1.30	2,811	11.93	2,304	8.89
No Response	703	2.98	781	3.01	872	3.70	675	2.61	1,214	5.15	1,186	4.58
TOTAL	23,556	100.00	25,910	100.00	23,556	100.00	25,910	100.00	23,556	100.00	25,910	100.00

10. – Occupations –
(See Instructions)

Father	Mother	You Want To Be	
☐	☐	☐	Workman
☐	☐	☐	Service Worker
☐	☐	☐	Machine Operator
☐	☐	☐	Skilled Craftsman or Foreman
☐	☐	☐	Salesman or Agent
☐	☐	☐	Office Worker
☐	☐	☐	Farm Owner or Manager
☐	☐	☐	Owner of a Business
☐	☐	☐	Technician
☐	☐	☐	Artist, Entertainer or Athlete
☐	☐	☐	Elected or Appointed Official
☐	☐	☐	Manager / Executive
☐	☐	☐	Profession (A)
☐	☐	☐	Profession (B)
☐	☐	☐	Housewife and No Other Employment
☐	☐	☐	I Do Not Know

For example, 13.52 percent of the fathers of the boys were workmen and only 1.33 percent of the boys wished to pursue that occupation. The same trend was evident in the categories of service worker and machine operator. However, 33.07 percent of the senior girls wanted to be office workers when only 12.47 percent of their mothers were office workers. While 1.14 percent of the senior boys planned to be farm owners or managers, 4.42 percent of their fathers were in this field. More than 20 times as many boys planned to be artists, entertainers, or athletes as were their fathers.

Another striking difference was in the occupational heading of manager or executive. In this category were 3,051 fathers, but only 1,710 seniors planned to follow in this field. About seven percent of the fathers and five percent of the mothers were in Professions A (teacher, social worker, etc.) and 18 percent of the senior boys and 23 percent of the senior girls planned to enter this category of professions. About three percent of the fathers were in Professions B (lawyer, doctor, etc.) while 13 percent of the senior boys and five percent of the senior girls planned to enter this category of professions. Slightly more than 50 percent of the mothers were housewives with no other employment and only 3.32 percent of the senior girls had similar plans.

The Number of Colleges to Which Applications Were Made—Question 11

The number of colleges to which the seniors applied for admission is shown in Table 10. Of the seniors who responded to the question, "How many colleges have you applied to?" nearly half (45.96 percent) applied to only one college, 11,633 (42.54 percent) applied to either two or three colleges, and 513 (nearly two percent) applied to six or more colleges for admission. Boys had a slight tendency to apply to more colleges than girls.

11. How Many Colleges Have You Applied To?

☐1 ☐2 ☐3 ☐4 ☐5 ☐6 or more

Analyses reported in Section III, Part A, indicated that students with higher aspirations, Professions B for example, tended to apply to fewer colleges and to have the highest expectation of attending those colleges to which they did apply. Students ranking toward the top of their high school classes and taking college preparatory programs also tended to apply to fewer colleges.

Types of Colleges Applied to in Order of Preference—Question 12

The types of colleges to which the seniors applied are shown in Column 1 of Table 11. For the State of Virginia, this breakdown is given by four-year and two-year colleges, both State and privately controlled, plus one category for all other types of colleges. Other classifications are by four-year and two-year colleges by geographical regions. A category for all foreign colleges is included.

12. List These Colleges in Order of Preference (See Instructions)

1st Choice		2nd Choice		3rd Choice	
☐0	☐0	☐0	☐0	☐0	☐0
☐1	☐1	☐1	☐1	☐1	☐1
☐2	☐2	☐2	☐2	☐2	☐2
☐3	☐3	☐3	☐3	☐3	☐3
☐4	☐4	☐4	☐4	☐4	☐4
☐5	☐5	☐5	☐5	☐5	☐5
☐6	☐6	☐6	☐6	☐6	☐6
☐7	☐7	☐7	☐7	☐7	☐7
☐8	☐8	☐8	☐8	☐8	☐8
☐9	☐9	☐9	☐9	☐9	☐9

Almost 70 percent (69.2) of the public school seniors who planned to attend college applied to a college located in Virginia and almost 38 percent preferred a four-year, State-controlled institution.

Status of College Applications—Question 13

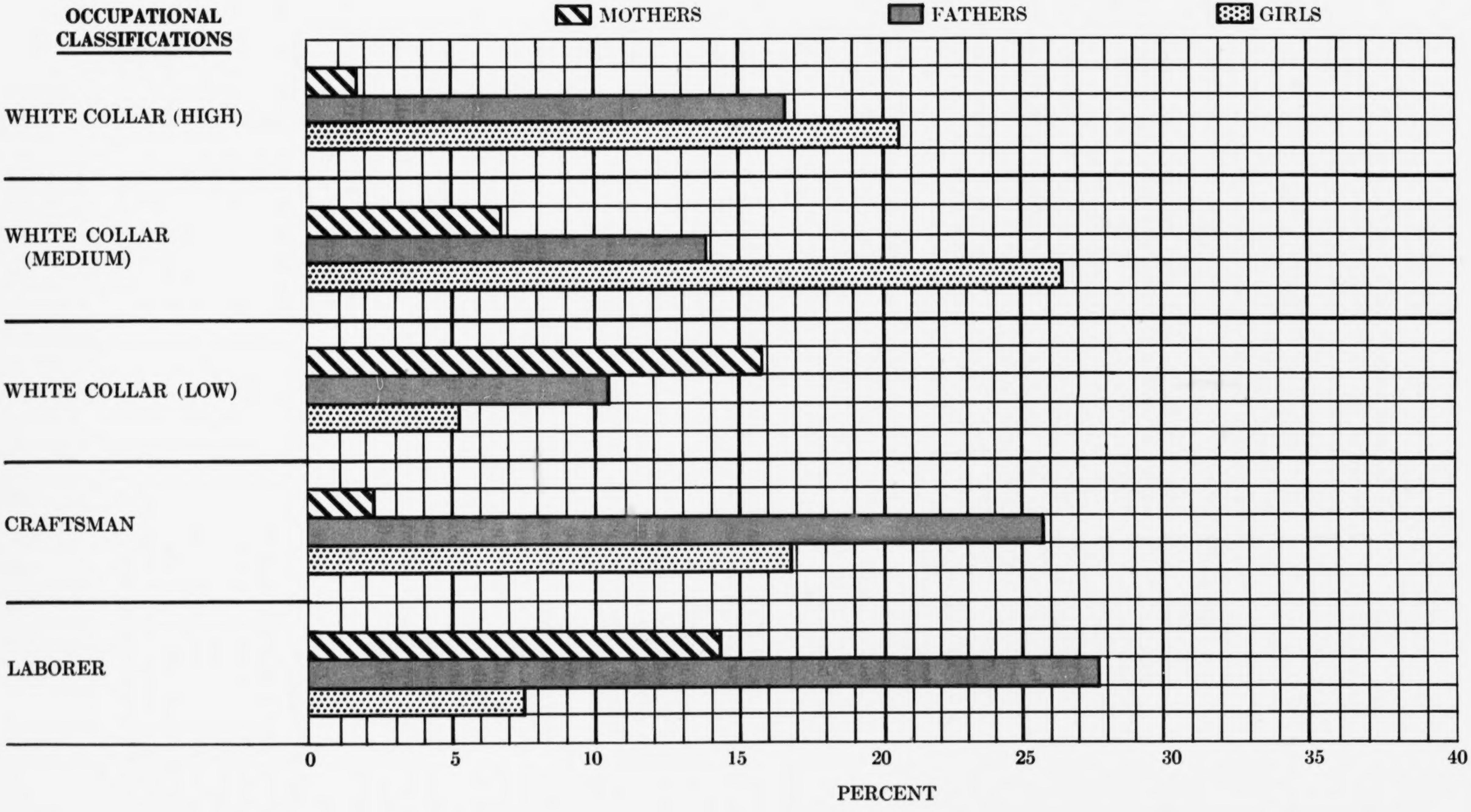
Table 12 reflects the number of seniors accepted or rejected by the college of their first, second, and third choices. The value of this question is indicated by the large number of seniors who knew the disposition of their college applications at the time of the survey (late May). Of the seniors who planned to enroll in college, 18,945 (70.8 percent) said they had been accepted by the college of their first choice; 8,520 (57.3 percent) had been accepted by the college of their second choice;

13. What is the Status of These Applications? (Mark the One in Each that Applies)

– Choices –			
1st	2nd	3rd	
☐	☐	☐	Accepted
☐	☐	☐	Rejected
☐	☐	☐	Standby or Unknown

GRAPH IIA

OCCUPATIONS—GIRLS AND PARENTS



GRAPH II

OCCUPATIONS—BOYS AND PARENTS

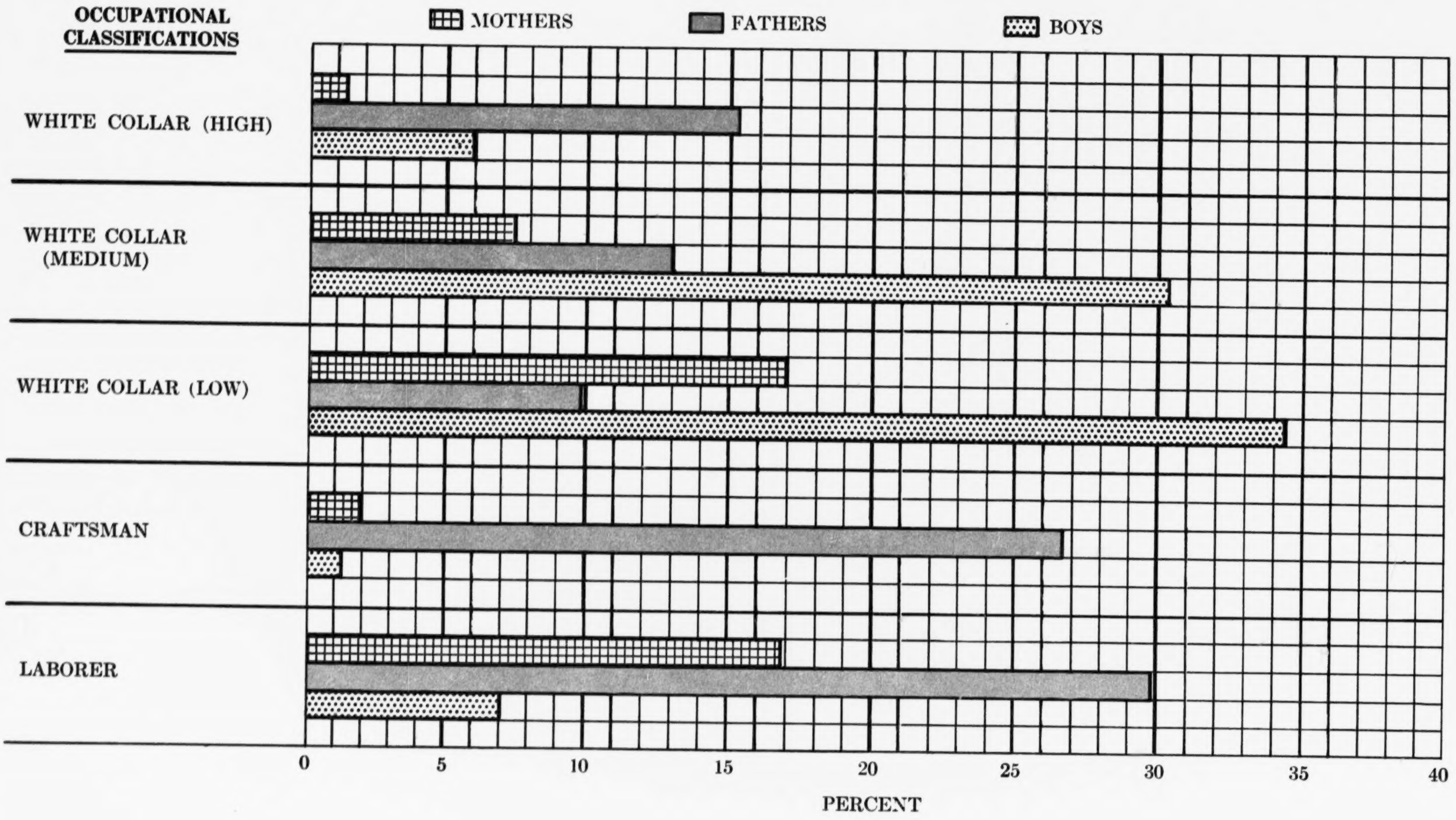


TABLE 10

Number of Colleges to Which Public School Seniors Applied

NUMBER OF COLLEGES	Boys		Girls		Total	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
One	6,171	44.43	6,399	47.56	12,570	45.96
Two	3,484	25.08	3,498	26.00	6,982	25.53
Three	2,440	17.57	2,211	16.43	4,651	17.01
Four	1,045	7.52	828	6.15	1,873	6.85
Five	445	3.20	312	2.32	757	2.77
Six or More	306	2.20	207	1.54	513	1.88
TOTAL	13,891	100.00	13,455	100.00	27,346	100.00

TABLE 11

TYPES OF COLLEGES APPLIED TO BY PUBLIC SCHOOL SENIORS IN ORDER OF PREFERENCE

	BOYS			GIRLS			TOTAL					
	First Choice	Second Choice	Third Choice	First Choice	Second Choice	Third Choice	First Choice		Second Choice		Third Choice	
	Number and Percent	Number and Percent	Number and Percent	Number and Percent	Number and Percent	Number and Percent	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Four-Year, State-Controlled Institution in Virginia	4,864 35.97	2,732 33.25	1,493 30.31	5,213 39.53	2,943 39.49	1,585 36.88	10,077	37.87	5,675	36.59	3,078	33.36
Two-Year, State-Controlled Institution in Virginia	2,166 16.01	747 9.09	373 7.57	855 6.48	279 3.74	1.30 3.02	3,021	11.35	1,026	6.57	503	5.45
Four-Year Private Institution in Virginia	1,200 8.87	993 12.09	615 12.49	1,098 8.33	684 9.18	442 10.28	2,298	8.63	1,677	10.64	1,057	11.46
Two-Year Private Institution in Virginia	486 3.59	441 5.36	240 4.87	660 5.01	415 5.57	237 5.51	1,146	4.31	856	5.41	477	5.17
Other Institution in Virginia	436 3.22	119 1.45	49 .99	1,430 10.84	363 4.87	164 3.82	1,866	7.01	482	3.05	213	2.31
Other Four-Year Institution in South	2,184 16.14	1,667 20.29	1,052 21.35	1,965 14.89	1,464 19.64	854 19.87	4,049	15.21	3,131	19.85	1,906	20.66
Other Two-Year Institution in South	585 4.32	323 3.93	165 3.35	503 3.81	244 3.27	128 2.98	1,088	4.09	567	3.59	293	3.18
Four-Year Institution in North	792 5.86	561 6.83	437 8.87	652 4.95	499 6.69	368 8.56	1,444	5.43	1,060	6.72	805	8.72
Two-Year Institution in North	59 .44	41 .50	17 .35	112 .85	71 .95	37 .86	171	.64	112	.71	54	.59
Four-Year Institution in Mid-west	381 2.82	306 3.72	218 4.42	425 3.22	261 3.50	179 4.16	806	3.03	567	3.59	397	4.30
Two-Year Institution in Mid-west	34 .25	16 .19	13 .26	20 .15	14 .19	8 .19	54	.20	30	.19	21	.23
Four-Year Institution in Far West	256 1.90	199 2.42	140 2.84	188 1.42	121 1.62	75 1.75	444	1.67	320	2.03	215	2.33
Two-Year Institution in Far West	28 .21	14 .17	15 .30	23 .17	18 .24	3 .07	51	.19	32	.20	18	.20
All Foreign Schools	53 .40	58 .71	100 2.03	46 .35	78 1.05	88 2.05	99	.37	136	.86	188	2.04
TOTAL PERCENT	13,524 100.00	8,217 100.00	4,927 100.00	13,190 100.00	7,454 100.00	4,298 100.00	26.614	100.00	15,671	100.00	9,225	100.00

GRAPH III

TYPE OF COLLEGE APPLIED TO IN ORDER OF PREFERENCE

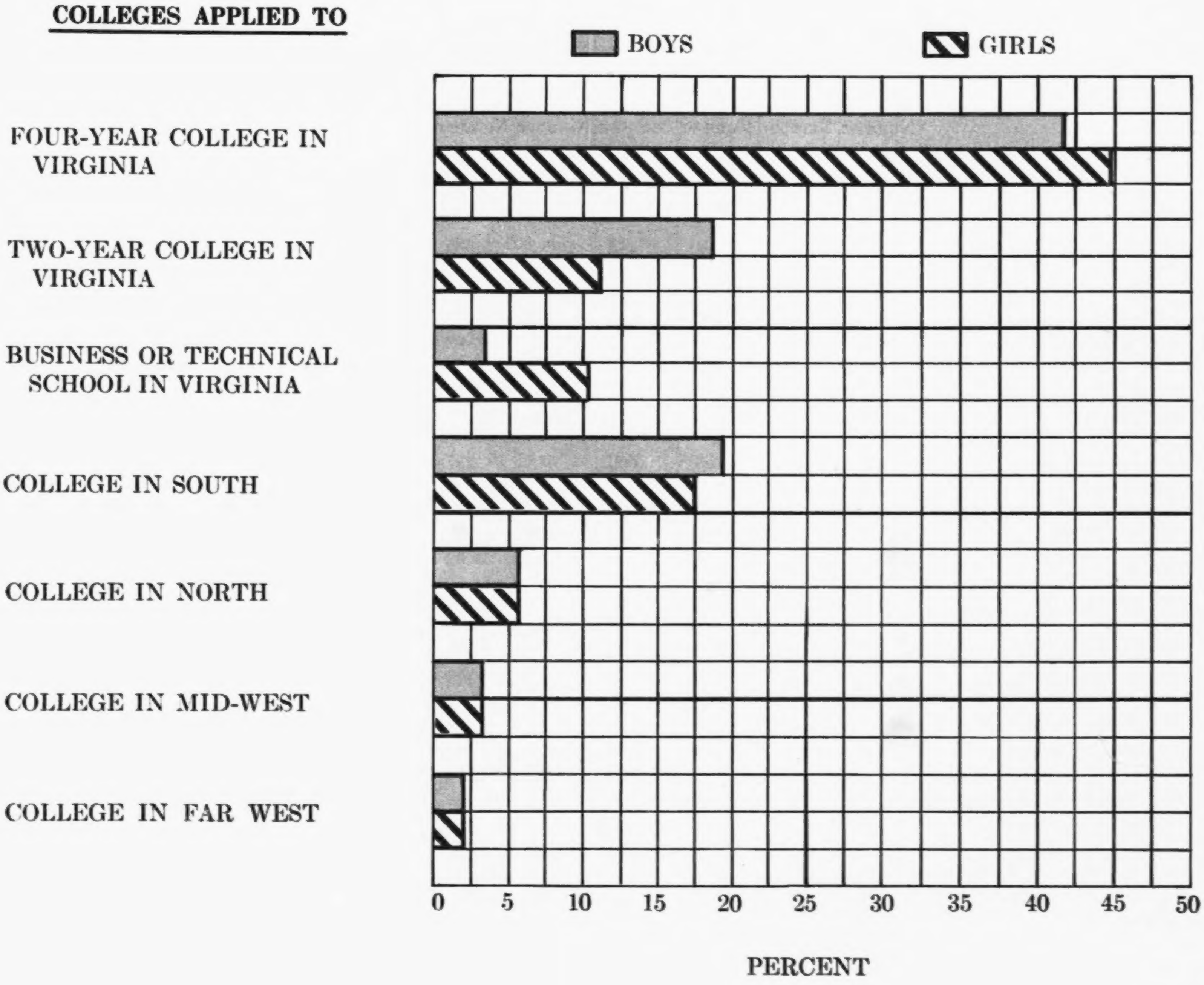


TABLE 12

STATUS OF COLLEGE APPLICATIONS OF PUBLIC SCHOOL SENIORS WHO APPLIED TO COLLEGE

	FIRST CHOICE					SECOND CHOICE					THIRD CHOICE				
	Boys		Girls		Total	Boys		Girls		Total	Boys		Girls		Total
	Number	Percent of Total	Number	Percent of Total		Number	Percent of Total	Number	Percent of Total		Number	Percent of Total	Number	Percent of Total	
Accepted	9,222	68.05	9,723	73.60	70.79	4,386	56.30	4,134	58.37	57.28	2,297	49.19	2,004	50.34	49.72
Rejected	1,611	11.89	1,163	8.81	10.37	1,415	18.16	1,229	17.35	17.78	910	19.49	747	18.76	19.15
Unknown	2,719	20.06	2,324	17.59	18.84	1,990	25.54	1,720	24.28	24.94	1,463	31.32	1,230	30.90	31.13
TOTAL	13,552	100.00	13,210	100.00	100.00	7,791	100.00	7,083	100.00	100.00	4,670	100.00	3,981	100.00	100.00

TABLE 13

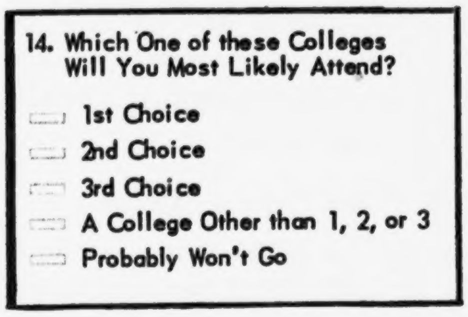
CHOICE OF COLLEGE PUBLIC SCHOOL SENIORS PLANNED TO ATTEND

	BOYS		GIRLS		TOTAL	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
First Choice	10,816	78.78	10,866	81.58	21,682	80.16
Second Choice	1,642	11.96	1,449	10.88	3,091	11.43
Third Choice	520	3.79	370	2.78	890	3.29
Other Than First, Second, Third Choice	304	2.21	248	1.86	552	2.04
Probably Will Not Attend	448	3.26	386	2.90	834	3.08
TOTAL	23,731	100.00	13,319	100.00	27,049	100.00

and 4,301 (49.7 percent) had been accepted by the college of their third choice.

College Which Students Will Most Likely Attend (Based on Preference)—Question 14

Of the seniors responding to the question in Table 13, 21,682 (80.2 percent) said they most likely will attend their first-choice college. Of particular importance to this study are the 834 seniors who expressed an interest in attending college by completing the survey form through Question 14, and then reporting that they probably would not attend any college. Section III, Part C, includes the report of a special analysis of 706 of these students. However, further attention and study could be devoted to this problem area.



14. Which One of these Colleges Will You Most Likely Attend?

☐ 1st Choice
☐ 2nd Choice
☐ 3rd Choice
☐ A College Other than 1, 2, or 3
☐ Probably Won't Go

Importance of Different Reasons for Choosing a College—Question 15

Of the seniors who responded to the question regarding the help they received in deciding on the college of their first choice (Table 14), 10,933 (40 percent) said they were influenced "very much" by the wishes of their parents; 9,195 (33.7 percent) by the reputation of the faculty; and 7,474 (27.4 percent) by the intellectual atmosphere of the college. Other factors which the seniors said influenced them "very much" in their first-choice selections were: Friendly social climate of the college, 7,071 (25.9 percent); location of the college (close to home), 6,936 (25.4 percent); and the desire to live away from home, 5,882 (21.5 percent).

Boys were influenced more than girls by the colleges' athletic programs and perhaps because their friends went to a particular college. Girls were influenced more than boys by faculty reputation, friendly social climate, religious emphasis, desire to live away from home, and intellectual atmosphere. One interesting problem with the method of collecting the data as reported is that girls were influenced more than boys; that is, girls checked "very much" more frequently, than did boys. No analysis was done to indicate if other subgroups, for example, rural and urban, would have similar tendencies.

15. To What Extent Did The Following Help You in Deciding on Your Plans after High School?
(Mark One Response for Each Item)

Very Much	Some	Very Little or None	
☐	☐	☐	Parents Want Me To Go There
☐	☐	☐	Parent, Relative, or Close Friend Went There
☐	☐	☐	Reputation of Faculty for Good Teaching
☐	☐	☐	Friendly Social Climate
☐	☐	☐	Emphasis on Religion
☐	☐	☐	Low Cost
☐	☐	☐	Good Athletic Program
☐	☐	☐	Coeducational
☐	☐	☐	It's Close to Home
☐	☐	☐	Want To Live Away From Home
☐	☐	☐	Friend(s) Is Going or Will Go There
☐	☐	☐	Offers Financial Assistance
☐	☐	☐	Good Intellectual Atmosphere
☐	☐	☐	Not Too Much Academic Competition
☐	☐	☐	Located in a Large Cosmopolitan Area

PART B

Frequencies of Answers Given by Private High School Seniors

The frequencies of answers which the 1967 seniors in privately supported schools gave on the Senior Survey are reported in the following tables. The questionnaire which was used to obtain these data is identical to the one used for the public high school seniors and may be found in Appendix A.

Plans After Graduation—Question 1

As indicated in Table 15, the majority (66.6 percent) of private school seniors planned to attend a four-year college. A higher percentage of boys (71.4) than girls (59.4) aspired to attend these institutions. Seniors who planned to continue school on a full-time basis included 88.5 percent of the boys and 80.4 percent of the girls. Planning to enter a full-time job were 8.28 percent of the girls and 2.44 percent of the boys. Of the boys, 3.12 percent planned to enter military service after graduation.

Source of Assistance With Decision on Plans After High School—Question 2

The private school seniors most often reported that their parents or relatives influenced their decisions about what to do after high school (Table 16). They were followed by counselors, classmates or friends, other adults, teachers, college students, and principals in this order.

Reasons for Not Attending College—Question 3

The percentages in Table 17 are based on only those private school seniors who did not plan to attend college after graduating from high school. The reason most often given by the private school seniors for not attending college was that their grades were not good enough. Giving "too expensive" as the reason for not attending college were 13.5 percent of the girls and 7.1 percent of the boys. About the same number of boys and girls (almost 14 percent) gave "lack of interest" as their reason for not attending college. Of the private school seniors, 21.4 percent indicated that they would rather get a job after graduation. This group was composed of 33.3 percent of the girls and 8.7 percent of the boys.

Time of Decision on Post-High School Plans—Question 4

The private school seniors' time of decision about what to do after graduation was fairly evenly distributed among the following categories: before the seventh grade (21.4 percent); in the ninth or tenth grades (20.1 percent); and this year (20.2 percent). Approximately the same distribution applied to boys and girls (Table 18). In May of their senior year, 5.2 percent of the boys and 4.4 percent of the girls had not decided on their post-high school plans.

Age Distribution of Private School Seniors—Question 6

As shown in Table 19, the 3,194 private school seniors were composed of 1,926 (60.3 percent) boys and 1,268 (39.7 percent) girls. The modal group, or

TABLE 14

Reasons for Deciding on the College of First Choice—Public School Seniors

	Very Much					Some					Very Little or None				
	Boys		Girls			Boys		Girls			Boys		Girls		
	Number	Percent of Total Boys	Number	Percent of Total Girls	Percent Total	Number	Percent of Total Boys	Number	Percent of Total Girls	Percent Total	Number	Per. cent of Total Boys	Number	Percent of Total Girls	Percent Total
Parent Wants Me to Go There	5,240	37.92	5,693	42.18	40.03	5,537	40.07	5,364	39.75	39.91	3,269	23.66	2,665	19.75	21.72
Parent, Relative, Friend Attended	1,928	13.95	2,155	15.97	14.95	3,262	23.61	3,088	22.88	23.25	8,753	63.34	8,363	61.97	62.66
Faculty Reputation	4,179	30.24	5,016	37.17	33.66	5,183	37.51	5,293	39.22	38.35	4,488	32.48	3,215	23.82	28.20
Friendly Social Climate	2,905	21.02	4,166	30.87	25.89	6,133	44.38	6,046	44.80	44.59	4,781	34.60	3,284	24.33	29.53
Religious Emphasis	654	4.73	1,068	7.91	6.30	2,087	15.10	2,677	19.84	17.44	11,027	79.80	9,738	72.15	76.02
Low Cost	2,796	20.23	2,635	19.52	19.88	4,950	35.82	4,583	33.96	34.90	6,103	44.16	6,309	46.75	45.44
Athletic Program	1,837	13.29	694	5.14	9.27	3,544	25.65	1,862	13.80	19.79	8,439	61.07	10,908	80.82	70.83
Co-Educational	2,517	18.21	2,838	21.03	19.60	5,239	37.91	4,362	32.32	35.15	5,996	43.39	6,212	46.03	44.69
Close to Home	3,472	25.12	3,464	25.67	25.39	3,723	26.94	4,080	30.23	28.57	6,669	48.26	6,010	44.53	46.42
Live Away From Home	2,522	18.25	3,360	24.90	21.53	4,138	29.94	4,336	32.13	31.02	7,128	51.58	5,805	43.01	47.35
Friends Attend	1,970	14.26	1,724	12.77	13.52	4,818	34.87	3,847	28.50	31.72	7,028	50.86	7,938	58.82	54.79
Offers Financial Assistance	1,818	13.16	2,028	15.03	14.08	2,800	20.26	3,059	22.67	21.45	9,161	66.29	8,398	62.23	64.28
Intellectual Atmosphere	3,355	24.28	4,119	30.52	27.36	6,228	45.07	6,138	45.48	45.27	4,226	30.58	3,232	23.95	27.30
No Academic Competition	661	4.78	585	4.33	4.56	2,921	21.14	2,681	19.87	20.51	10,212	73.90	10,197	75.56	74.72
In Large Cosmopolitan Area	1,163	8.42	1,431	10.60	9.50	2,661	19.26	2,695	19.97	19.61	9,984	72.25	9,372	69.44	70.86

GRAPH IV

REASONS FOR DECIDING ON THE COLLEGE OF FIRST CHOICE—PUBLIC SCHOOL SENIORS

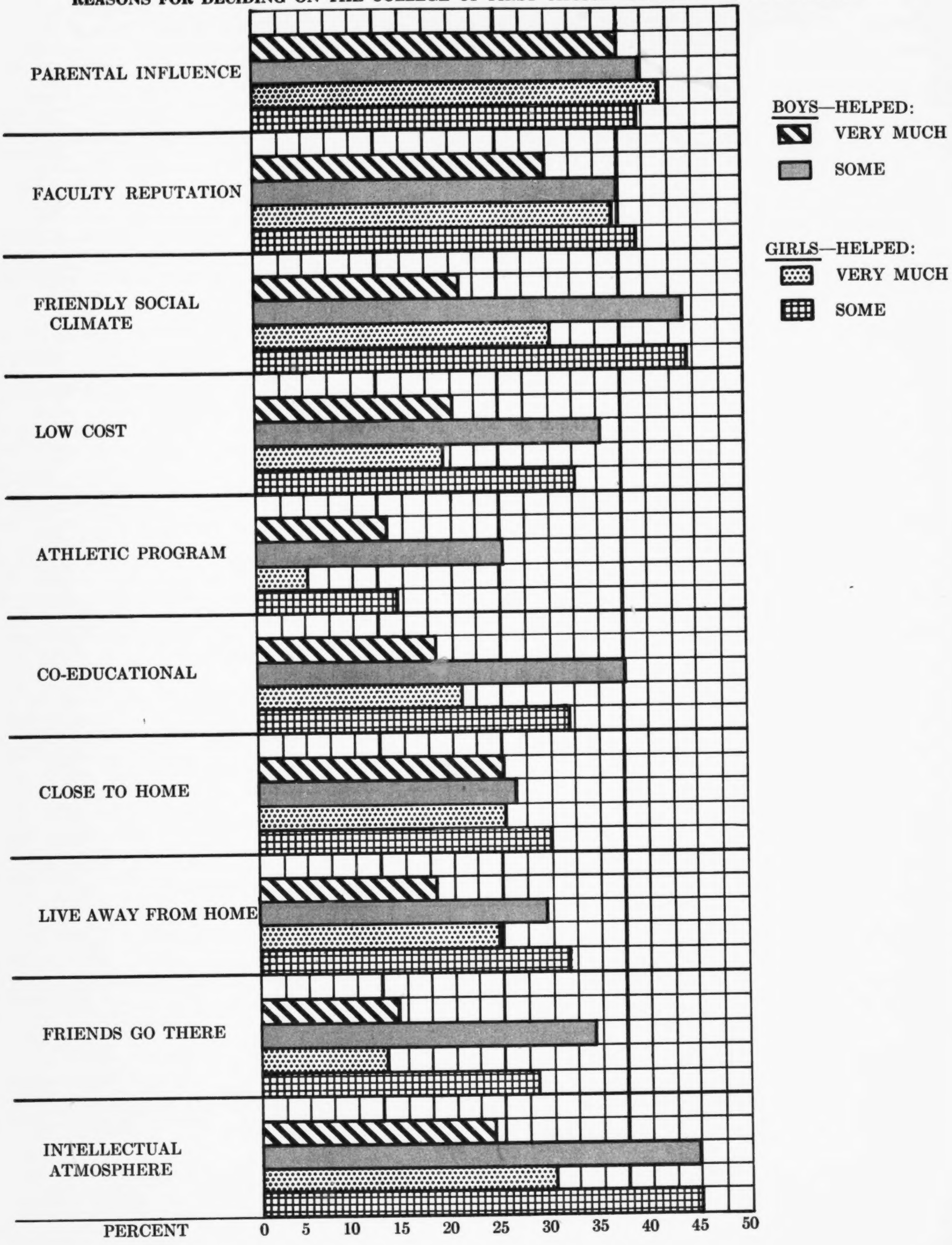


TABLE 15

Private High School Seniors' Plans After Graduation

	Boys		Girls		Total	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Work and Part-Time School	38	1.97	53	4.18	91	2.85
Full-Time Job	47	2.44	105	8.28	152	4.76
Business, Trade, or Technical School	73	3.79	89	7.02	162	5.07
Four-Year College	1,376	71.44	753	59.38	2,129	66.65
Academic Program at Junior or Community College	219	11.37	129	10.17	348	10.90
Vocational or Technical Program at Junior or Community College	36	1.87	48	3.79	84	2.63
Housewife		.00	13	1.03	13	.41
Military Service	60	3.12	3	.24	63	1.97
Other	37	1.92	34	2.68	71	2.22
No Definite Plans	37	1.92	36	2.84	73	2.29
No Response	3	.16	5	.39	8	.25
TOTAL	1,926	100.00	1,268	100.00	3,194	100.00

TABLE 16

Source of Assistance with Decision on Plans After High School—Private High School Seniors

	Very Much				Some				Very Little				No Response			
	Boys		Girls		Boys		Girls		Boys		Girls		Boys		Girls	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Parent or Relative	1,034	53.69	634	50.00	683	35.46	507	39.98	200	10.38	122	9.62	9	.47	5	.39
High School Teachers	311	16.15	144	11.36	779	40.45	470	37.07	808	41.95	625	49.29	28	1.45	29	2.29
High School Counselor	386	20.04	215	16.96	669	34.74	447	35.25	840	43.61	575	45.35	31	1.61	31	2.44
High School Principal	224	11.63	95	7.49	395	20.51	222	17.51	1,267	65.78	917	72.32	40	2.08	34	2.68
College Students	208	10.80	149	11.75	581	30.17	377	29.73	1,092	56.70	709	55.91	45	2.34	33	2.60
Classmates or Friends	275	14.28	192	15.14	839	43.56	553	43.61	779	40.45	501	39.51	33	1.71	22	1.74
Other Adults	305	15.84	153	12.07	807	41.90	474	37.38	764	39.67	612	48.26	50	2.60	29	2.29

TABLE 17

Frequencies of Reasons Given by Private High School Seniors for Not Attending College

	Boys		Girls		Total	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Too Expensive	18	7.09	37	13.55	55	10.44
Grades Not Good Enough	79	31.10	48	17.58	127	24.10
Parents Don't Believe I Should	4	1.57	4	1.47	8	1.52
Rather Get a Job	22	8.66	91	33.33	113	21.44
Rather Get Married	4	1.57	19	6.96	23	4.36
Military Service	50	19.69	2	.73	52	9.87
Lack of Interest	35	13.78	38	13.92	73	13.85
Do Not Know	42	16.54	34	12.46	76	14.42
TOTAL	254	100.00	273	100.00	527	100.00

TABLE 18

Time of Private High School Seniors' Decision on What to Do After High School

	Boys		Girls		Total	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Have Not Decided Yet	101	5.24	56	4.42	157	4.92
Just This Year	372	19.31	272	21.45	644	20.16
In 11th Grade	341	17.71	203	16.01	544	17.03
In 9th or 10th Grade	418	21.70	225	17.74	643	20.13
In 7th or 8th Grade	152	7.89	108	8.52	260	8.14
Before 7th Grade	381	19.79	303	23.90	684	21.42
Do Not Know	150	7.79	87	6.86	237	7.42
No Response	11	.57	14	1.10	25	.78
TOTAL	1,926	100.00	1,268	100.00	3,194	100.00

age group with the largest number of individuals, was the 18-year-old group for boys and the 17-year-old group for girls. In the 17-year-old category were 32.2 percent of the boys and 47.8 percent of the girls. In the 18-year-old category were 48.6 percent of the boys and 46.6 percent of the girls, and in the 19-year-old category were 14.3 percent of the boys and three percent of the girls. Three and a half percent of the boys in private high schools were 20 years old or older.

Commuting Distance from Colleges and Technical Schools—Question 7

A large proportion of the private school seniors lived near institutions which offered post-secondary school training. Most of the boys (85.7 percent) and girls (87.9 percent) reported living within commuting distance of a four-year college (Table 20). More of the private school seniors reported living within commuting distance of a four-year college (2,766) than those who reported living within commuting distance of a junior or community college (2,500).

Educational Level of Parents—Question 8

Having graduated from college were 24.7 percent of the fathers (788) and 22.1 percent of the mothers (706) of private school seniors (Table 21). Another 20 percent (640) of the fathers and 29 percent (925) of the mothers were reported as having some college, technical, or special training. Almost four times as many fathers as mothers had completed graduate school (704 to 190). The seniors indicated, however, that of those who only finished high school, the mothers outnumbered the fathers 947 to 509 (29.6 percent to 15.9 percent).

Type of High School Program—Question 9

Of the private school seniors, 85.6 percent of the boys and 76.6 percent of the girls had taken a college preparatory program (Table 22). Another 10.7 percent of the seniors had taken a general high school program, and this number was about equally divided between the boys and girls. Girls outnumbered boys (148 to 33) for those taking a commercial or business program.

Occupations of Parents and Occupational Plans of Seniors—Question 10

About half of the private school boys and one-third of the girls planned to enter Professions A or B. Professions A included occupations such as social worker, school teacher, etc., and Professions B was composed of lawyers, architects, etc. The girls showed some preference (14.7 percent) for the office worker category, and 10.6 percent of the boys planned to be managers or executives (Table 23). In the office worker category were 14.5 percent of the mothers of the girls and in the manager or executive category were 23.4 percent of the fathers of the boys. The senior boys reported that 14.6 percent of their fathers were owners of businesses and only 5.7 percent of the boys planned to enter this field. Over half of the mothers were housewives with no other employment and only 3.1 percent of the senior girls had made similar plans.

TABLE 19

AGE DISTRIBUTION OF VIRGINIA'S 1967 PRIVATE HIGH SCHOOL SENIORS

	BOYS		GIRLS		TOTAL	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
16 or Under	8	.42	10	.79	18	.56
17	620	32.19	606	47.79	1,226	38.38
18	936	48.59	591	46.61	1,527	47.81
19	276	14.33	38	3.00	314	9.83
20 or Over	67	3.48	6	.47	73	2.29
No Response	19	.99	17	1.34	36	1.13
TOTAL	1,926	100.00	1,268	100.00	3,194	100.00

TABLE 20

NUMBER OF PRIVATE SCHOOL SENIORS LIVING WITHIN COMMUTING DISTANCE OF COLLEGES AND TECHNICAL SCHOOLS

	YES				NO				DO NOT KNOW				NO RESPONSE			
	Boys		Girls		Boys		Girls		Boys		Girls		Boys		Girls	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Business, Trade or Technical School	1,559	80.94	1,114	87.85	131	6.80	46	3.63	184	9.55	83	6.55	52	2.70	25	1.97
Junior or Community College	1,508	78.30	992	78.23	197	10.23	125	9.86	165	8.57	117	9.23	56	2.91	34	2.68
Four-Year College	1,651	85.72	1,115	87.93	181	9.40	78	6.15	65	3.37	51	4.02	29	1.51	24	1.89

TABLE 21

EDUCATIONAL LEVEL OF PARENTS AS REPORTED BY PRIVATE HIGH SCHOOL SENIORS

	FATHER				MOTHER			
	Boys		Girls		Boys		Girls	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Grade School	95	4.93	75	5.91	50	2.60	51	4.02
Some High School	160	8.31	114	8.99	130	6.75	104	8.20
Finished High School	324	16.82	185	14.59	582	30.21	365	28.79
Some College, Technical, or Special Training	385	19.99	255	20.11	534	27.73	391	30.83
Graduated From College	499	25.91	289	22.80	459	23.83	247	19.48
Graduate School	406	21.08	298	23.50	116	6.02	74	5.84
Do Not Know	48	2.49	43	3.39	40	2.08	27	2.13
No Response	9	.47	9	.71	15	.78	9	.71
TOTAL	1,926	100.00	1,268	100.00	1,926	100.00	1,268	100.00

TABLE 22

TYPES OF HIGH SCHOOL PROGRAMS TAKEN BY PRIVATE SCHOOL SENIORS

	BOYS		GIRLS		TOTAL	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Commercial or Business	33	1.71	148	11.67	181	5.67
College Preparatory	1,648	85.57	971	76.58	2,619	81.99
General	211	10.96	132	10.41	343	10.74
Vocational	12	.62	6	.47	18	.56
Other	11	.57	2	.16	13	.41
No Response	11	.57	9	.71	20	.63
TOTAL	1,926	100.00	1,268	100.00	3,194	100.00

TABLE 23

Occupations of Parents and Occupational Plans of Private High School Seniors

	Father				Mother				You Want To Be			
	Boys		Girls		Boys		Girls		Boys		Girls	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Workman	42	2.18	48	3.79	12	.62	5	.39	6	.31	1	.08
Service Worker	50	2.60	36	2.84	50	2.60	37	2.92	12	.62	25	1.97
Machine Operator	40	2.08	34	2.68	15	.78	26	2.05	9	.47	2	.16
Skilled Craftsman or Foreman	161	8.36	123	9.70	8	.42	3	.24	76	3.95	2	.16
Salesman or Agent	153	7.94	80	6.31	67	3.48	38	3.00	21	1.09	11	.87
Office Worker	91	4.72	45	3.55	266	13.81	184	14.51	35	1.82	186	14.67
Farm Owner or Manager	59	3.06	54	4.26	2	.10	3	.24	25	1.30	3	.24
Owner of Business	281	14.59	122	9.62	41	2.13	25	1.97	110	5.71	5	.39
Technician	33	1.71	27	2.13	42	2.18	32	2.52	49	2.54	124	9.78
Artist, Entertainer or Athlete	4	.21	11	.87	9	.47	17	1.34	81	4.21	111	8.75
Elected or Appointed Office	29	1.51	26	2.05	4	.21	3	.24	21	1.09	26	2.05
Manager or Executive	456	23.68	313	24.68	20	1.04	11	.87	205	10.64	29	2.29
Professions A	224	11.63	144	11.36	168	8.72	104	8.20	435	22.59	323	25.46
Professions B	251	13.03	163	12.85	37	1.92	11	.87	543	28.19	150	11.83
Housewife—No Other Employment	2	.10	1	.08	1,140	59.18	740	58.35	4	.21	39	3.08
Do Not Know	25	1.30	18	1.42	8	.42	10	.79	220	11.42	186	14.67
No Response	25	1.30	23	1.81	37	1.92	19	1.50	74	3.84	45	3.55
TOTAL	1,926	100.00	1,268	100.00	1,926	100.00	1,268	100.00	1,926	100.00	1,268	100.00

The Number of Colleges to Which Applications Were Made—Question 11

Table 24 shows the number of colleges to which private school seniors applied for admission. The distribution is divided about equally between those seniors who applied to one, two, three, or more than three colleges. A larger percentage of the girls than boys (33.75 to 23.34) applied to only one college. Almost three times as many boys as girls applied to six or more colleges.

Types of Colleges Applied to in Order of Preference—Question 12

Table 25 presents the number and percentage of students who applied to college by category and choice—first, second, or third. Of the 2,760 private school seniors who reported a first-choice college, 1,085 (39.3 percent) reported a college in Virginia as their first choice, and of these 626 (22.7 percent) preferred a four-year, State-controlled institution. Of the college-bound seniors, 2,303 (72.1 percent) indicated that they

TABLE 24

NUMBER OF COLLEGES TO WHICH PRIVATE SCHOOL SENIORS APPLIED

NUMBER OF COLLEGES	Boys		Girls		Total	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
One	404	23.34	349	33.75	753	27.23
Two	353	20.39	188	18.18	541	19.57
Three	428	24.73	239	23.12	667	24.12
Four	266	15.37	140	13.54	406	14.68
Five	155	8.95	75	7.25	230	8.32
Six or More	125	7.22	43	4.16	168	6.08
TOTAL	1,731	100.00	1,034	100.00	2,765	100.00

planned to attend a four-year institution, 26.2 percent preferring an institution in the South, and 17.3 percent preferring an institution in the North.

Status of College Applications—Question 13

Table 26 indicates that 67.4 percent of the boys and 71.2 percent of the girls who were seniors in private schools were accepted by the college of their first choice. Accepted at their second-choice institution were 55.1 percent of the boys and 59.6 percent of the girls, and accepted at their third choice of college were 53.8 percent of the boys and 56.4 percent of the girls. These percentages are based on only the number who were planning to attend college, and who reported a first, second and/or third choice.

College Which Students Will Most Likely Attend (Based on Preference)—Question 14

A majority of the private school seniors (72.7 percent) said they most likely will attend their first-choice college (Table 27). Planning to attend their second-choice college were 16.2 percent of the seniors, and planning to attend their third-choice college were 6.9 percent of the seniors.

Importance of Different Reasons for Choosing a College—Question 15

The private school seniors appeared to consider faculty reputation as a most important reason for choosing the college which they most wanted to attend (35.8 percent for boys and 38.6 percent for girls). Other important considerations were intellectual atmosphere (28.8 percent for boys and 32.9 percent for girls), parents' desires (28.2 percent for boys and 28.6 percent for girls), and friendly social climate (26.2 percent for boys and 29.3 percent for girls). More boys than girls seemed to desire co-educational institutions, and the athletic program influenced more of the boys than girls. More girls than boys were influenced by the college's location in a large metropolitan area (196 to 171), and a greater percentage of girls than boys (21.1 percent to 17.3 percent) were influenced by the desire to live away from home (Table 28).

TABLE 25

TYPES OF COLLEGES APPLIED TO BY PRIVATE SCHOOL SENIORS IN ORDER OF PREFERENCE

	BOYS			GIRLS			TOTAL					
	First Choice	Second Choice	Third Choice	First Choice	Second Choice	Third Choice	First Choice		Second Choice		Third Choice	
	Number and Percent	Number and Percent	Number and Percent	Number and Percent	Number and Percent	Number and Percent	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Four-Year, State-Controlled Institution in Virginia	379 22.07	260 18.90	193 18.38	247 23.68	160 9.80	115 20.91	626	22.68	420	19.91	308	19.25
Two-Year, State-Controlled Institution in Virginia	53 3.09	28 2.03	20 1.90	23 2.21	11 .67	4 .73	76	2.75	39	1.85	24	1.50
Four-Year, Private Institution in Virginia	152 8.85	152 1.05	112 10.67	99 9.49	69 4.23	58 10.55	251	9.09	221	10.48	170	10.63
Two-Year, Private Institution in Virginia	34 1.98	26 1.89	24 2.29	27 2.59	35 2.14	19 3.45	61	2.21	61	2.89	43	2.69
Other Institution in Virginia	14 .82	3 .22	6 .57	57 5.47	12 .73	5 .91	71	2.57	15	.71	11	.69
Other Four-Year Institution in South	519 30.23	457 33.21	332 31.62	205 19.65	145 8.88	112 20.36	724	26.23	602	28.54	444	27.75
Other Two-Year Institution in South	86 5.01	56 4.07	51 4.86	36 3.45	24 1.47	17 3.09	122	4.42	80	3.79	68	4.25
Four-Year Institution in North	276 16.07	247 17.95	184 17.52	201 19.33	161 9.86	119 21.64	477	17.28	408	19.35	303	18.94
Two-Year Institution in North	33 1.[illegible]	14 1.02	13 1.24	45 4.31	39 2.39	44 8.00	78	2.83	53	2.51	57	3.56
Four-Year Institution in Mid-west	104 6.06	75 5.45	62 5.90	53 5.08	40 2.45	30 5.45	157	5.69	115	5.45	92	5.75
Two-Year Institution in Mid-west	9 .52	5 .36	6 .57	1 .10	2 .12	2 .36	10	.36	7	.33	8	.50
Four-Year Institution in Far West	41 2.39	45 3.27	33 3.14	27 2.59	21 1.29	14 2.55	68	2.46	66	3.13	47	2.94
Two-Year Institution in Far West	5 .29	2 .15	2 .19	3 .29	3 .18	1 .18	8	.29	5	.24	3	.19
All Foreign Schools	12 .70	6 .44	12 1.14	19 1.82	11 .67	10 1.82	31	1.12	17	.81	22	1.38
TOTAL PERCENT	1,717 100.00	1,376 100.00	1,050 100.00	1,043 100.00	1,633 100.00	550 100.00	2,760	100.00	2,109	100.00	1,600	100.00

TABLE 26

Status of College Applications of Private School Seniors Who Applied to College

	First Choice				Second Choice				Third Choice			
	Boys		Girls		Boys		Girls		Boys		Girls	
	Number	Per-cent of Total	Number	Per-cent of Total	Number	Per-cent of Total	Number	Per-cent of Total	Number	Per-cent of Total	Number	Per-cent of Total
Accepted	1,162	67.36	733	71.23	748	55.12	419	59.60	558	53.81	292	56.37
Rejected	333	19.30	175	17.01	328	24.17	159	22.62	233	22.47	108	20.85
Unknown	230	13.33	121	11.76	281	20.71	125	17.78	246	23.72	118	22.78
TOTAL	1,725	100.00	1,029	100.00	1,357	100.00	703	100.00	1,037	100.00	518	100.00

TABLE 27

Choice of College Private School Seniors Planned to Attend

	Boys		Girls		Total	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
First Choice	1,251	72.10	762	73.69	2,013	72.70
Second Choice	278	16.02	170	16.44	448	16.18
Third Choice	136	7.84	55	5.32	191	6.90
Other Than First, Second, Third Choice	48	2.77	24	2.32	72	2.60
Probably Will Not Attend	22	1.27	23	2.22	45	1.63
TOTAL	1,735	100.00	1,034	100.00	2,769	100.00

TABLE 28

Reasons for Deciding on the College of First Choice—Private School Seniors

	Very Much				Some				Very Little or None			
	Boys		Girls		Boys		Girls		Boys		Girls	
	Number	Per-cent of Total	Number	Per-cent of Total	Number	Per-cent of Total	Number	Per-cent of Total	Number	Per-cent of Total	Number	Per-cent of Total
Parent Wants Me to Go There	544	28.25	362	28.55	707	36.71	436	34.38	485	25.18	255	20.11
Parent, Relative, Friend Attended	247	12.82	141	11.12	429	22.27	236	18.61	1,056	54.83	670	52.84
Faculty Reputation	689	35.77	490	38.64	671	34.84	348	27.44	373	19.37	205	16.17
Friendly Social Climate	505	26.22	371	29.26	802	41.64	467	36.83	425	22.07	203	16.01
Religious Emphasis	112	5.82	82	6.47	241	12.51	189	14.91	1,380	71.65	772	60.88
Low Cost	209	10.85	144	11.36	510	26.48	231	18.22	1,011	52.49	670	52.84
Athletic Program	237	12.31	52	4.10	545	28.30	152	11.99	945	49.07	843	66.48
Co-Educational	418	21.70	216	17.03	589	30.58	226	17.82	722	37.49	602	47.48
Close to Home	327	16.98	209	16.48	458	23.78	272	21.45	949	49.27	563	44.40
Live Away From Home	333	17.29	268	21.14	548	28.45	312	24.61	850	44.13	467	36.83
Friends Attend	223	11.58	103	8.12	558	28.97	259	20.43	951	49.38	683	53.86
Offers Financial Assistance	136	7.06	102	8.04	263	13.66	159	12.54	1,331	69.11	780	61.51
Intellectual Atmosphere	554	28.76	417	32.89	815	42.32	423	33.36	368	19.11	203	16.01
No Academic Competition	71	3.69	48	3.79	329	17.08	195	15.38	1,331	69.11	800	63.09
In Large Cosmopolitan Area	171	8.88	196	15.46	425	22.07	210	16.56	1,131	58.72	643	50.71

III. PHASE II OF THE SENIOR SURVEY

As mentioned in Section I, an Applied Multiple Linear Regression Approach was selected as the technique for a more comprehensive analysis of data from the Senior Survey. Besides providing for multiple linear regression, the technique[1] yields means, standard deviations, and zero-order correlation coefficients for variables entered into the different analyses.[2]

This section includes a summary of the analyses used in determining the answers to the three general questions selected. Data from the 52,620 public and private high school seniors is used. The question, "How did seniors differ according to whether they were enrolled in public or private high schools, whether they were males or females, and whether they were planning to enroll in college following high school graduation?" is covered in Part A. The question, "How did the extent to which seniors were helped by different persons vary with their plans after high school graduation?" is covered in Part B. The question, "How is the choice of college and status of college application related to selected variables?" is covered in Part C. In addition, analysis of the data from seniors who applied to one or more colleges but indicated that they would not attend any college is reported in Part C. Appendixes F, G, H, and I present an explanation of the regression approach and a derivation of the models used for the different analyses reported in this section.

A. COMPARISONS USING A PUBLIC-PRIVATE SCHOOL, MALE-FEMALE, COLLEGE-NON-COLLEGE CLASSIFICATION WITH RELATED VARIABLES

All seniors who were surveyed responded with answers that would place them in one of eight categories using type of school, sex, and whether or not they planned to attend college as factors for categorizing. Each classification was assigned two levels: public and private, male and female, and college and non-college, respectively. The eight categories were:

1. Boys in public schools who planned to attend college
2. Boys in public schools who did not plan to attend college
3. Boys in private schools who planned to attend college
4. Boys in private schools who did not plan to attend college
5. Girls in public schools who planned to attend college
6. Girls in public schools who did not plan to attend college
7. Girls in private schools who planned to attend college
8. Girls in private schools who did not plan to attend college

The following three general questions were posed:[3]

1. Are there differences among boys and girls in the college and non-college groups that are associated with whether they attended public or private high schools?
2. Are there differences among public and private school seniors that are attributable to whether they are boys or girls?
3. Are there differences among boys and girls in public schools and in private schools that are associated with whether or not they planned to attend college?

The questions were asked for the following 17 criterion measures:

1. What the seniors wanted to be (Question 10, Variable 2)[4]

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[1] This technique has been programmed for a Burroughs 5500 computer under the code name "ITEREG."

[2] It is vitally important to remember that correlation coefficients produced in the AMLR approach must be treated with extreme caution. Whenever the variables entered into the correlation routine of the "ITEREG" program are continuous variables, correlation coefficients have the meaning usually associated with them. Whenever the variables are not continuous, they are useful in that they indicate possible relationships and clustering of variables which are coded and not continuous variables. For this reason, only correlation coefficients which were deemed to be meaningful are reported in this part of the Survey report.

[3] See Appendix F for a discussion of the regression analysis; see Appendix G for the regression models used for this analysis.

[4] The question numbers refer to the Senior Survey form (Appendix A), and the variable numbers to the variables as coded on the tape and explained in Appendix E. However, the variable numbers may not be the same as those in the derivation of regression models because they were assigned by "GENVEC" as is explained in Appendix F.

2. The total number of seniors in the graduating class (Variable 6)
3. The total number of seniors per class going to college (Questions 1 and 14, Variable 9)
4. The percent of seniors per class going to college (Variable 12)
5. The type of program pursued (Question 9, Variable 13)
6. The age of the seniors surveyed (Question 6, Variable 14)
7. The occupational level of the father (Question 10, Variable 16)
8. The occupational level of the mother (Question 10, Variable 17)
9. The educational level of the father (Question 8, Variable 18)
10. The educational level of the mother (Question 8, Variable 19)
11. The verbal score on the School and College Ability Test (Question A, Variable 20)
12. The quantitative score on the School and College Ability Test (Question B, Variable 21)
13. The total score on the School and College Ability Test (Question C, Variable 22)
14. The percentile rank of the senior in his high school class (Question F, Variable 23)
15. The time when the decision was made about what the senior wanted to do (Question 4, Variable 24)
16. The number of colleges the senior applied to (Question 11, Variable 36)
17. The choice of the college that the senior probably will attend (Question 13, Variable 43)

The number and percent of seniors in each of the eight categories, as well as the number and percent of seniors in each of the 14 other possible classifications, are given in Table 29. Small deviations from the frequencies reported in Section II may occur because (1) the numbers reported in this section were derived from percentages; (2) a few records which were not complete enough for analysis were excluded; and (3) the numbers of students in a particular category, e.g., college or non-college, may be taken from different questions in the survey. The design of the survey form was such that it was not always clear which of the eight possible categories the student belonged in. For example, it was not clear whether business, trade, or technical school was a "college."

TABLE 29

NUMBERS AND PERCENTAGES IN EIGHT CATEGORIES USING PUBLIC-PRIVATE SCHOOL, MALE-FEMALE, COLLEGE-NON-COLLEGE CLASSIFICATION

CATEGORY	Number	Percent
Boys in Public School Planning to Attend College	13,859	26.38
Boys in Public School Not Planning to Attend College	9,646	18.36
Boys in Private School Planning to Attend College	1,728	3.29
Boys in Private School Not Planning to Attend College	194	.37
Girls in Public School Planning to Attend College	13,398	25.50
Girls in Public School Not Planning to Attend College	12,441	23.68
Girls in Private School Planning to Attend College	1,035	1.97
Girls in Private School Not Planning to Attend College	236	.45
TOTAL	52,537	100.00
Boys in Public School	23,505	44.74
Boys in Private School	1,922	3.66
Girls in Public School	25,839	49.18
Girls in Private School	1,271	2.42
TOTAL	52,537	100.00
Public School	49,344	93.92
Private School	3,193	6.08
TOTAL	52,537	100.00
Boys	25,427	48.40
Girls	27,110	51.60
TOTAL	52,537	100.00
Total Planning to Attend College	30,020	57.14
Total Not Planning to Attend College	22,517	42.86
TOTAL	52,537	100.00
Public School Seniors Planning to Attend College	27,257	55.24
Public School Seniors Not Planning to Attend College	22,087	44.76
TOTAL	49,344	100.00
Private School Seniors Planning to Attend College	2,763	86.53
Private School Seniors Not Planning to Attend College	430	13.47
TOTAL	3,193	100.00

Differences associated with the type of school attended. The following is a discussion of the differences associated with whether or not the students attended a public or private high school using several criterion measures. It can be seen from Tables 30, 31, and 32 that when the criterion variable was what the seniors wanted to be (Survey Question 10), the private school seniors indicated a higher aspirational level. Furthermore, while the aspirational level of boys and girls differed, the boys differed by a greater amount. Although no regression model was constructed to show this fact, it is likely that all or most of the difference was among the boys. It also can be observed from Table 31 that when the criterion variable was percent of seniors in each class going to college, the private schools showed a greater percentage of seniors planning to attend college.

When the criterion variable was the type of program pursued in high school (Survey Question 9), the private school seniors tended more toward a college preparatory program, but again the greater differences were among the boys. The private school senior boys in the college groups were older than their public school counterparts while public school boys in the non-college groups were older. The occupational level of parents of seniors in the private schools appeared to be higher than that of parents of seniors in the public schools. The mothers' occupational levels appeared to be lower than the fathers', but this possibly is due to the fact that most mothers were classified as housewives. Similar differences were observed when the criterion considered was the educational level of the parent, but in this case the differences were not as great between father and mother.

With the exception of girls in private schools in the non-college category, private school seniors decided their future plans earlier than public school seniors. This could have been related to the occupational and educational level of their parents, since the same trend was evident in the college-non-college comparison.

Differences associated with sex. When the criterion variable was what the seniors wanted to be (Survey Question 10), girls in the college groups aspired to a lower occupational level than boys in the same groups. Girls tended more toward a college preparatory program than did boys except for the boys in private schools who planned to attend college. This contradiction is very probably explained by the fact that some girls aspired to become housewives, a lower code on the scale. Girls in all categories were younger than boys. Boys outscored girls on the quantitative section of the School and College Ability Test. When the criterion variable was rank in high school class, however, girls were consistently higher than boys. This seems to confirm the conjecture offered by some people that girls are graded on a "different" scale.

Differences associated with college-non-college classification. When the criterion variable was the number of seniors in the graduating class, the seniors who did not plan to attend college appeared to come from smaller classes. This factor probably is associated with geographical location of the schools because the same trend was evident in the percent of seniors going to college. The non-college-bound seniors were older than the college-bound seniors and decided on what to do after high school (Survey Question 4) later in their school life.

Other differences. While no regression models were written to test interaction, some cases in which interaction may have been present were indicated by the differences in the group means on some of the criterion measures. The level of aspiration (Survey Question 10) was in favor of the boys in the college groups but changed in favor of the girls in the non-college groups. This possibly was because the girls in both groups preferred to become office workers or housewives while the boys had no such common aspiration and, therefore, were more widely scattered on the scale.

The means of each of the eight categories on each of the 17 criterion variables appear in Table 30. The numerical values given to each of the possible answers on the Senior Survey form are given in Appendixes D and E. The means should be interpreted with caution. In cases where the variables are coded, general trends can be determined, but little more than this can be safely inferred. In cases where the variables are accepted measures—for example, the SCAT scores—the means can be interpreted in the usual way.

Table 31 contains the means on 15 criterion variables for the categories public, private, boys, girls, college and non-college. The significance of the differences in these means is indicated by the F-ratios in Table 32. Those F-ratios which were considered significant are marked with an asterisk. As an illustration, the F-ratio of 18.94* in Column 1, Row 1 of Table 32 indicates that the difference in "What the senior wanted to be" for public school seniors and for private school seniors was significant at the 0.01 level. The public school seniors (Table 31) had a mean of 3.95 and the private school seniors had a mean of 3.19 for criterion variable number one, "What the senior wanted to be." Appendix E (Variable A. 1, Survey Question 10) indicates that the higher levels of aspiration were coded with lower numerals. Therefore, the difference indicates that private school seniors aspired more toward the professional end of the scale. Each of the variables may be similarly interpreted.

TABLE 30

Table of Means for Each of the Eight Categories on 17 Criterion Variables

VARIABLE	1 Boys Public School College	2 Boys Public School Non-College	3 Boys Private School College	4 Boys Private School Non-College	5 Girls Public School College	6 Girls Public School Non-College	7 Girls Private School College	8 Girls Private School Non-College	Total Group
1. What the Senior Wanted to Be (1—Highest)	3.16	5.08	2.73	4.55	3.32	4.65	3.42	4.38	3.91
2. Total Number of Seniors in Graduating Class	290	235	83	75	285	237	75	69	253
3. Total Number of Seniors Per School Going to College	195	137	71	57	191	140	67	54	163
4. Percent of Seniors Per School Going to College	62	52	86	72	62	53	88	73	60
5. Type of Program Pursued (1—College Preparatory)	1.66	2.97	1.19	2.22	1.50	2.50	1.21	2.07	2.04
6. Age of Senior Surveyed (1—Youngest)	2.76	3.31	2.89	3.06	2.57	2.93	2.51	2.72	2.86
7. Occupational Level of Father (1—Highest)	3.64	5.13	2.56	3.85	3.67	5.19	2.48	4.15	4.23
8. Occupational Level of Mother (1—Highest)	4.19	4.68	3.82	4.19	4.15	4.66	3.82	4.36	4.36
9. Educational Level of Father (1—Highest)	3.72	5.03	2.78	4.15	3.69	5.05	2.66	4.36	4.22
10. Educational Level of Mother (1—Highest)	3.82	4.79	3.18	4.03	3.74	4.81	3.16	4.31	4.18
11. School and College Ability Test—Verbal	284.46	272.32	279.45	279.02	285.09	273.65	277.27	279.40	279.49
12. School and College Ability Test—Quantitative	299.96	287.75	293.66	294.03	296.89	286.61	291.95	291.01	293.35
13. School and College Ability Test—Total	291.53	280.11	286.72	286.64	290.39	279.96	286.79	286.39	286.71
14. Percentile Rank of Senior in High School	57	37	63	57	69	48	74	67	55
15. Time When Decision Was Made (1—Earliest)	3.57	4.79	3.48	4.48	3.34	4.47	3.23	4.59	3.99

TABLE 31

Table of Means for Combined Categories—Private, Public, Male, Female, College-Bound Seniors, and Non-College-Bound Seniors for 15 Criterion Variables

VARIABLE	Means					
	Public	Private	Male	Female	College	Non-College
1. What the Senior Wanted to Be (1—Highest)	3.95*	3.19	3.87*	3.94	3.22*	4.83
2. Total Number of Seniors in Graduating Class	265*	79	253	253	268*	233
3. Total Number of Seniors Per School Going to College	169*	68	164	162	182*	137
4. Percent of Seniors Per School Going to College	58*	85	60*	59	64*	53
5. Type of Program Pursued (1—College Preparatory)	2.08*	1.32	2.13*	1.96	1.55*	2.69
6. Age of Senior Surveyed (1—Youngest)	2.86*	2.76	2.98*	2.73	2.67*	3.09
7. Occupational Level of Father (1—Highest)	4.33*	2.73	4.13	4.33	3.55*	5.14
8. Occupational Level of Mother (1—Highest)	4.39*	3.88	4.35	4.37	4.14*	4.66
9. Educational Level of Father (1—Highest)	4.30*	2.94	4.16	4.28	3.62*	5.03
10. Educational Level of Mother (1—Highest)	4.24*	3.31	4.15*	4.21	3.72*	4.79
11. SCAT—Verbal	279.53*	278.71	279.47*	279.49	284.20*	273.19
12. SCAT—Quantitative	293.37*	292.93	294.85*	291.93	297.95*	287.21
13. SCAT—Total	286.07*	286.71	286.83*	285.43	290.58*	280.15
14. Percentile Rank of Senior in High School	.54*	.66	.50*	.60	.63*	.44
15. Time When Decision Was Made (1—Earliest)	4.02*	3.54	4.13*	3.87	3.53*	4.61

*Difference is significant at .01 level.

TABLE 32

Table of F-Ratios for Three Comparisons on 17 Criterion Variables

	Public vs. Private	Boy vs. Girl	College vs. Non-College
1. What the Senior Wanted to Be	18.94*	79.36*	1738.88*
2. Total Number of Seniors in Graduating Class	1030.09*	1.79	277.13*
3. Total Number of Seniors Per School Going to College	597.42*	2.25	518.22*
4. Percent of Seniors Per School Going to College	1353.73*	7.45*	964.68*
5. Type of Program Pursued	161.89*	387.32*	4771.52*
6. Age of Senior Surveyed	20.11*	432.65*	980.20*
7. Occupational Level of Father	207.82*	2.13	1583.39*
8. Occupational Level of Mother	46.75*	2.12	377.58*
9. Educational Level of Father	282.80*	2.59	2405.82*
10. Educational Level of Mother	184.77*	8.12*	2167.17*
11. School and College Ability Test—Verbal	38.72*	5.27*	573.96*
12. School and College Ability Test—Quantitative	29.75*	22.82*	472.40*
13. School and College Ability Test—Total	25.01*	3.41*	549.28*
14. Percentile Rank of Senior in High School	63.23*	474.84*	1314.70*
15. Time When Decision Was Made	14.87*	181.54*	1574.79*
16. Number of Colleges Applied To	391.95*	49.59*	
17. Choice of College Senior Will Probably Attend	7.20*	8.21*	

*Difference is significant at .01 level.

The F-ratios should be interpreted with the usual caution observed when interpreting repeated tests. The F-ratios in Table 32 come from one-way analysis of variance tests using the comparisons recorded in the column headings. Furthermore, because of the large number of students used in the analysis, what is statistically significant should be considered in light of what is "practically" a significant difference. In comparing public and private seniors on "What the senior wanted to be," for example, four is probably really lower on the aspirational scale than is three (3.95 approximately equals four; 3.19 approximately equals three).

Variables for Which Further Study Is Suggested. The "ITEREG" program yields product-moment correlation coefficients for all of the variables put into the regression model. The information which was put on tape for analysis using the Applied Multiple Linear Regression approach was coded in such a way that correlation coefficients would be useful in gaining information about which variables might be most important in this analysis and which might be carefully measured and included in the planned, follow-up study or other similar studies. The following discussion is concerned with those variables which appeared to be correlated and which appeared to be measures important enough to receive careful attention in future studies.

For the regression models under consideration here, there were 17 criterion measures which were generated for the regression program.[1] The correlation coefficients in Table 33 indicate that the aspirations of the seniors, as measured by what they indicated they wanted to be, showed the expected relationship with such social factors as the educational level of the mother ($r = 0.20$), educational level of the father ($r = .21$), etc. The correlation coefficient for what the seniors wanted to be with the time they made their decision ($r = 0.26$) suggested the possibility that those who had the highest aspirations reached a decision earlier. The means for criterion variable number 15, time the decision was made, supported this contention.

The correlation coefficients for what the seniors wanted to be with the number of colleges applied to ($r = 0.30$) and the choice of college the senior will likely attend ($r = 0.34$) suggests the possibility that the higher the aspirational level the fewer the number of colleges applied to. The correlation coefficients for the number of colleges applied to with the choice of college the senior would likely attend ($r = 0.86$) also indicate the possibility that those who apply to fewer colleges have the highest expectation of continuing their education. This possibility is supported by the correlation coefficients for the number of colleges applied to with high school rank ($r = -0.27$) and with the type of program pursued ($r = 0.43$).

The measures on the *occupational* level of the father and the mother and their respective measures of *educational* level exhibited the expected relationships. These

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[1] Listed previously on pages 31-32.

TABLE 33

Table of Correlation Coefficients for the 17 Variables for Which Further Study is Suggested

	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
(1) What the Senior Wanted to Be			.32		.19		.21	.20					.26	.30	.34
(2) Total Number of Seniors in Graduating Class	.95	.34			-.21		-.27	-.20							
(3) Total Number of Seniors Per School Going to College		.54			-.29		-.35	-.26							
(4) Percent of Seniors Per School Going to College			-.25		-.38		-.43	-.36						-.20	-.27
(5) Type of Program Pursued				.27	.31		.37	.34	-.22	-.21	-.22	-.34	.30	.43	.49
(6) Age of Senior Surveyed							.21	.21				-.23		.21	.24
(7) Occupational Level of Father						.32	.58	.44					.20	.25	.33
(8) Occupational Level of Mother							.28	.32							
(9) Educational Level of Father								.63					.25	.30	.39
(10) Educational Level of Mother													.24	.30	.37
(11) SCAT Verbal Score										.68	.72				-.20
(12) SCAT Quantitative Score											.73				
(13) SCAT Total Score															-.20
(14) Percentile Rank of Senior in High School													-.23	-.27	-.31
(15) Time When Decision Was Made														.26	.34
(16) Number of Colleges Applied To															.86
(17) Choice of College Senior Will Probably Attend															

measures appeared frequently in correlations with the other variables. Those for the father appeared more frequently and generally showed higher correlation coefficients.

The correlation coefficients for type of program pursued with the scholastic factors—SCAT scores, percentile rank in class, etc., were in line with expectations as were the means for the criterion measures reported in Table 31. For private schools, however, the anticipated difference between the college and non-college groups was not found.

B. COMPARISONS OF THE EXTENT TO WHICH THE SENIORS WERE HELPED BY VARIOUS INDIVIDUALS WITH THEIR PLANS AFTER GRADUATION AND SOME RELATED COMPARISONS

This section deals with the answers to the question, "Who exerted the greatest influence on students in making their decision?" It was also considered useful to know which other factors, such as school-related, socio-economic, and scholastic, influenced the seniors in making their decisions.

Bentley and Salter[1] reported a study dealing with the role of the counselor in helping seniors to get into college and the role which seniors expected the counselor to fulfill. Two hundred twenty-nine (229) freshmen were used who were admitted to a small liberal arts college from 233 different high schools. The information was obtained by questionnaire (90 percent return).

In answering the question, "Who would you say influenced you most in selecting your college?" the responses of the freshmen indicated that the parent was most influential in the college decision and that the counselor was next most influential. When only parents and counselors were considered, Bentley's data showed that the percentage in each of the three levels—most important, next in importance, third most important—was about equally divided between parents and counselors, each with about 20 percent in each of the three categories. In a study reported by Kerr[2] these percentages were 66 for parents and eight for counselors. These results were not directly comparable since Kerr asked the question in a different form—"Whose assistance was most valuable to you in making your decision to attend college?"[3] Both studies, however, revealed that parents were most influential in the student's decision to attend college. The fact that other people besides parents and counselors also helped to influence these decisions suggests that caution should be exercised in making comparisons between them.

In a study reported by Roemmich and Schmidt,[4] the percentages were almost the same as those reported by Kerr. In answer to the question, "Who assisted you in selecting a college?" 41 percent indicated parents and five percent indicated counselors. However, the answers were 48 percent for counselors and nine percent for parents in answer to the question, "Who assisted you in making college plans?"[5] The geographic origin of the students in the studies by Bentley, Kerr, and Roemmich were different, and this could account for some of the differences in their findings. A more likely explanation, however, lies in the makeup of the groups studied, although Bentley and Salter attributed their findings to the increased role played by the counselor in more recent years. Bentley and Salter surveyed students actually enrolled in college, whereas the other study surveyed all students whose plans included college. Consideration of only college-bound students could have accounted for the importance of parents in the decision.

A study of Georgia's 1966 high school graduates[6] pointed to the fact that the answer to the question about relative influence depends upon the way in which the question is asked. A sample of 1,850 students who graduated from high school in 1966 were requested to complete a questionnaire in April of 1967. The graduates were asked to indicate what they "considered to be their primary source of guidance and information concerning post-high school educational opportunities."[7] *Counselors* were reported as the primary source of information by 31 percent of the seniors, *parents* by 25 percent, *friends* by 18 percent, *teachers* by seven percent, *advertisements* by six percent, and *other* by 13 percent.

It seems reasonable to assume, on the basis of the reports of these four studies, that counselors do influence seniors' decisions, although they may do so in an indirect way by providing information for decisions rather than by directly influencing the decisions. Consequently, when studying the influence of counselors and others on seniors' decisions, care should be taken to consider the different roles of those who are influencing these decisions and the wording used to ask the question on the survey form.

The Senior Survey form contained response categories which permitted examination of the question concerning who influenced a senior's decision and the extent to which that decision was influenced. The seniors were asked to what extent the following persons helped in their decisions about plans after high school:

1. Parent or other relative
2. High school teacher
3. High school counselor
4. High school principal
5. Students on college campus
6. Classmates or friends
7. Other adults

The categories indicating the extent of the influence were: (1) very much, (2) some, (3) very little or none, and (4) no-response. This breakdown permitted the generation of responses on criterion variables into four mutually exclusive categories for each of the seven sources of influence. The following general question was posed:

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[1] J. C. Bentley and S. Salter, "College Freshman View Counselor Help in College Selection," *Personnel and Guidance Journal*, XLII (October, 1967), pp. 178-183.

[2] W. D. Kerr, "Student Perceptions of Counselor Role in the College Decision," *Personnel and Guidance Journal*, XLI (December, 1962), pp. 337-342.

[3] *Ibid.*, p. 338.

[4] H. Roemmich and J. L. Schmidt, "Student Perceptions of Assistance Provided by Counselors in College Planning," *Personnel and Guidance Journal* XLI (October, 1962), pp. 157-158.

[5] *Ibid.*, p. 158.

[6] Thomas F. McDonald, "Georgia's 1966 High School Graduates, A Self-Portrait," Georgia Educational Improvement Council, 705 Hartford Building, 100 Edgewood Avenue, N.E., Atlanta, Georgia 30303.

[7] *Ibid.*, p. 28.

1. Are there differences associated with who influenced the seniors' decisions and the extent to which that decision was influenced when the criterion is, in a general sense, what the seniors plan to do after graduation?

Extent to which seniors were helped. A random sample of 1,000 students was selected from the tape of the seniors' responses. The regression models were run on this sample to determine how the seniors' plans after graduation were influenced by those persons listed on the survey form.[8]

The percent of responses in each of the categories for each of those persons who influenced the decision appear in Table 34. The percent of "no-response" is also shown for each category. From Table 34 it is clear that "parent or other relative" exerted the greatest influence on the seniors' decision.

The distribution of the percent in the "no-response" category suggests that the answers were a function of the social distance of the person from the student. The further the person was from the respondent, the more difficult it was for him to respond. If a response was made, it seemed more likely to appear in the "very little-or-none" category.

TABLE 34

PERCENT OF RESPONSES BY CATEGORY FOR EACH PERSON WHO INFLUENCED THE SENIORS' DECISIONS

	Very Much	Some	Very Little or None	No Response
Parent or Other Relative	47.01	38.91	13.33	0.75
High School Teacher	12.58	38.06	46.70	2.66
High School Counselor	17.81	39.55	40.19	2.45
High School Principal	2.35	11.62	82.41	3.62
Students on College Campus	6.93	24.73	63.65	4.69
Classmates or Friends	13.11	48.61	35.61	2.67
Other Adults	14.82	40.72	40.09	4.37

Variables related to extent of influence. When the regression models were run, correlations[9] were computed to determine whether or not students were influenced to the same extent by different people; for instance, did some students mark "very much" in several categories. One might use such information to begin to identify groups of students who seek a special kind of help in making their decisions. The results of this analysis revealed several interesting possibilities.

A significant number of seniors who were helped "very much" by parents were also helped "very much" by counselors, classmates, and friends, as well as being helped "some" by high school teachers, students on college campuses, and other adults. A significant number of those who indicated that they were helped "very much" by a teacher were also helped "very much" by counselors and principals. This is an especially interesting finding in view of the fact that principals made such a poor showing in the composite percentages. The same finding was true of the category "some," i.e., "some" help was received from teachers, counselors, and principals.

A significant number of those seniors who indicated that they were helped "very much" by students on college campuses were also helped "very much" by classmates, friends, and other adults. This indicates that there was a sizeable group of students making decisions "outside" the accustomed channels.

The categories relating to what the seniors aspired to become and the persons exerting influence were compared. A significant number of those influenced "very much" by parents planned to attend a four-year college. Those influenced "very little" by parents did not plan any post-high school training. Also, a significant number of those influenced "very little" by counselors did not plan any post-high school training. Significant numbers of those influenced "very much" and "some" by students on college campuses planned to attend a four-year college.

The regression models used for determining whether the "no-reponse" items influenced the results showed no significant effect of the "no-response" items.

C. COMPARISON OF CHOICE OF COLLEGE WITH STATUS OF COLLEGE APPLICATION AND WITH RELATED VARIABLES

Respondents to the survey indicated which of their choices of college they would most likely attend (Question 14)[10]. They also indicated whether their applications at each choice of institution had been accepted, or rejected, or if the status was standby or unknown (Question 13). The public school seniors' responses were analyzed to determine if the choice level of the college, i.e., first, second, third, was related to the status of the applications in the three choice categories. For example, were the students accepted by the college of their first choice, and to what other variables could their degree of acceptance be attributed? The regression models included criterion measures sufficient to examine the relationship of choice of college to the following variables:[11]

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[8] For a discussion of the regression models used for this analysis, see Appendix H of this report.

[9] The correlation coefficients are not produced here since their purpose was to identify patterns of responses. Their meaning is not the same as that usually associated with product-moment correlations.

[10] Question numbers refer to the question on the Senior Survey form.

1. What the seniors wanted to be (Question 10, Variable 2)[12]
2. Classification of school division (Variable 3).
3. Percent of seniors per class going to college (Variable 12)
4. The type of program pursued (Question 9, Variable 13)
5. The occupational level of the father (Question 10, Variable 16)
6. The occupational level of the mother (Question 10, Variable 17)
7. The educational level of the father (Question 8, Variable 18)
8. The educational level of the mother (Question 8, Variable 19)
9. The verbal score on the School and College Ability Test (Question A, Variable 20)
10. The quantitative score on the School and College Ability Test (Question B, Variable 22)
11. The total score on the School and College Ability Test (Question C, Variable 22)
12. The percentile rank of the senior in his high school class (Question E, Variable 23)
13. The time the decision was made (Question 4, Variable 24)
14. The reasons for not going to college (Question 3, Variable 35)
15. The number of colleges the senior applied to (Question 11, Variable 36)
16. The status of the application to the first-choice institution (Question 13, Variable 40)
17. The status of the application to the second-choice institution (Question 13, Variable 41)
18. The status of the application to the third-choice institution (Question 13, Variable 42)
19. The choice of college the senior will most likely attend (Question 14, Variable 43)
20. The verbal score on the Scholastic Aptitude Test (Question D, Variable 59)
21. The math score on the Scholastic Aptitude Test (Question E, Variable 60)

The regression analysis was run with the response data coded for the "ITEREG" program for the 27,257 college applicants in public schools. Of these, 706 indicated that they probably would not attend college.

A separate regression analysis was run on this group of 706 students in an attempt to determine what some of their characteristics were.

The following variables were used in this analysis:[13]

1. The educational level of the father (Question 8, Variable 18)
2. The educational level of the mother (Question 8, Variable 19)
3. The verbal score on the School and College Ability Test (Question A, Variable 20)
4. The quantitative score on the School and College Ability Test (Question B, Variable 21)
5. The total score on the School and College Ability Test (Question C, Variable 22)
6. The percentile rank of the senior in his high school class (Question F, Variable 23)
7. The proximity of a business, trade, or technical school (Question 7, Variable 32)
8. The proximity of a junior college (Question 7, Variable 33)
9. The proximity of a four-year college (Question 7, Variable 34)
10. The Verbal Scholastic Aptitude Test score (Question E, Variable 59)
11. The Math Scholastic Aptitude Test score (Question F, Variable 60)

In examining the relation of choice of college to the application status, three categories of response for the application status were generated for each of the three choices. The criterion variable used was whether the senior planned to attend his first, second, or third choice of college (Question 14, Variable 43). The general question considered was:

> Are there differences in the choice levels (first, second, or third choice) of colleges that are associated with the status of the application?

The question was asked for each of the three choice levels, i.e., application to the institution of first choice, application to the institution of the second choice, and application to the institution of the third choice.

Choice Level and Application Status. When the criterion variable was the choice of college the senior planned to attend and the generated categories were status of application—accepted, rejected, and standby or unknown—models for each of the three choices gave significant F-ratios. For first-choice application the F-ratio was 35,072, for second-choice application the F-ratio was 80, and for third-choice application the

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[11] See Appendix I for a discussion of the regression models for this analysis.

[12] See Appendix E for coding of variables.

[13] See Appendix E for explanation of codes.

F-ratio was 52. The meanings of these significant differences, however, were not as clear as was hoped. One interpretation may be that students rated a college as their first choice because their application had been accepted there. Also, almost half of this group had applied to only one college.

The means on choice of college which the student planned to attend for each of the three statuses of application are given in Table 35. As indicated in Appendix E, the choice level of the colleges was coded: first choice—1, second choice—2, third choice—3, another choice—4, and probably will not go or no response—5. Table 35 may therefore be interpreted as follows:

The majority of those seniors whose first-choice college applications were accepted planned to attend. With a mean of one for first-choice college accepted, all students accepted at their first choice of college would have planned to attend. However, with a mean of 1.14, a few planned not to attend their first college even though their application had been accepted. Aside from the few in the standby category who are optimistic about entering their first-choice college, it can be seen in Table 35 that seniors whose first-choice college applications were "rejected" or "standby or unknown" planned to attend the college of their second or third choice.

What was happening in the cases of second- and third-choice applications was not clear. The low means could be explained if it is assumed that students whose first-choice applications were accepted also had second and third choices accepted. The low means in the standby category for second and third choices probably indicated optimism on the part of the seniors who had no word on the action taken by those colleges considering their applications. The models used in the analysis did not provide answers to the questions which arose in connection with these assumptions, and further analysis is recommended to provide more information about what the relationships really are.

TABLE 35

Means on Choice of College Which Seniors Planned to Attend for Three Statuses of Application to Institutions of First, Second, and Third Choices

	First-Choice College	Second-Choice College	Third-Choice College
Accepted	1.14	1.39	1.59
Rejected	2.60	1.69	1.53
Standby or Unknown	1.88	1.44	1.41

Choice Level and Other Variables. The regression model included several vectors which were generated for the purpose of identifying variables that might have been related to whether the student planned to attend the college of his first, second, or third choice. The results of this analysis were not clear. However, it appeared that the status of the application to the institution of the senior's first choice was the only variable likely to be related to the choice of college the senior attended.

Seniors Who Applied to College but Who Probably Will Not Attend. Table 36 gives the means on several

TABLE 36

Means on 11 Variables for 706 Seniors Who Applied to College But Who Probably Will Not Go and Means for All the Public School College Applicants

VARIABLES	Means for Those Who Applied to College But Probably Will Not Go	Means for All Applicants
The Educational Level of the Father	4.26	3.71
The Educational Level of the Mother	4.29	3.78
The Verbal Score on the School and College Ability Test	277.45	284.78
The Quantitative Score on the School and College Ability Test	293.04	298.46
The Total Score on the School and College Ability Test	285.44	290.97
The Percentile Rank of the Senior in His High School Class	50.00	63.00
The Proximity of a Business, Trade, or Technical School	1.25	*
The Proximity of a Junior College	1.32	*
The Proximity of a Four-Year College	1.34	*
The Verbal Scholastic Aptitude Test Score	445.57	465.93
The Math Scholastic Aptitude Test Score	458.15	486.54

*Models to produce means for the "all applicants" group were not written.

criteria for the seniors who indicated that they had applied to college but probably would not attend. The criterion measures used were for those characteristics which were listed previously. In addition, for purposes of comparison, the means on the available criterion measures for all public school college applicants are included in the table.

The differences between the groups on these measures are obviously quite large. The dichotomous nature of these codes, however, made inferences unwise. The reasons for not going on to college almost surely were associated with the socio-economic status of the parents and, perhaps to a somewhat lesser degree, with scores on the standardized tests. It is recommended that further analysis and subsequent studies be made of this group in much more detail. For example, a selection could be made on one or more of the variables which were shown by the correlations to be important—educational level of parents, etc.

Variables for Which Further Study Is Suggested: An Additional Note

In Table 37 is a summary of selected correlation coefficients based on the total population (as in Table 33) and the corresponding correlation coefficients when only the public school college applicants were considered. To be included, a correlation coefficient must have been about equal to or greater than 0.20 in absolute value in both cases. These correlation coefficients indicate which variables are related, and they give some indication as to how future studies may be designed. For example, the table shows a correlation coefficient of 0.32 for the total seniors for "What the seniors wanted to be" with "Type of program pursued"

TABLE 37

Correlation Coefficients of Selected Variables Which Were Correlated for the Total Public School Group of Seniors and Correlated to About the Same Extent for Only the Public School College Applicants

VARIABLE	Total Public School College Applicants	Total Public School Seniors
Seniors' Aspirations		
What the Seniors Wanted to Be—With		
Type of Program Pursued	0.17	0.32
Time Decision Was Made	0.18	0.26
Percent of Graduating Class Attending College—With		
Occupational Level of Father	−0.35*	−0.38*
Educational Level of Father	−0.40*	−0.43*
Educational Level of Mother	−0.29*	−0.36*
Number of Colleges Applied To	0.23	−0.20
Type of Program Pursued—With		
Occupational Level of Father	0.20	0.31
Educational Level of Father	0.24	0.37
Educational Level of Mother	0.21	0.34
SCAT Verbal Score	−0.18*	−0.22*
SCAT Quantitative Score	−0.18*	−0.21*
SCAT Total Score	−0.18*	−0.22*
Percentile Rank of Seniors in High School Class (Low Number Rank = High Number Percentile)	−0.29*	−0.34*
Time Decision Was Made	0.23	0.30
Number of Colleges Applied To	−0.20*	0.43†
Occupational Level of Father—With		
Occupational Level of Mother	0.31	0.32
Educational Level of Father	0.57	0.58
Educational Level of Mother	0.40	0.44
Number of Colleges Applied To	−0.25*	0.25†

*Denotes a "false" negative correlation which is due to the manner in which the weights were assigned; e.g., high occupational level assigned a low numerical code.

†Indicates a "false" positive correlation.

TABLE 37—CONTINUED

VARIABLE	Total Public School College Applicants	Total Public School Seniors
Occupational Level of Mother—With		
Educational Level of Father	0.28	0.28
Educational Level of Mother	0.34	0.32
Educational Level of Father—With		
Educational Level of Mother	0.58	0.25
Time Decision Was Made	0.18	0.30
Number of Colleges Applied To	−0.29*	0.39†
Educational Level of Mother—With		
Time Decision Was Made	0.17	0.24
Number of Colleges Applied To	−0.30*	0.30†
SCAT Verbal Score—With		
SCAT Quantitative Score	0.20	0.68
SCAT Total Score	0.73	0.72
SCAT Quantitative Score—With		
SCAT Total Score	0.75	0.73
Percentile Rank of Seniors in High School Class—With		
Time Decision Was Made (Early = 1)	−0.22*	−0.23
Time Decision Was Made—With		
Number of Colleges Applied To	−0.16*	0.26†

*Denotes a "false" negative correlation which is due to the manner in which the weights were assigned; e.g., high occupational level assigned a low numerical code.

†Indicates a "false" positive correlation.

and a coefficient of 0.17 for the public school college applicants. This indicates a higher degree of correlation between the total seniors group aspirations and type of program pursued than for the public school college applicants. This is probably due to the fact that college-bound seniors took a college preparatory course which is restrictive in the sense that it covers only preparation for college, not the course of study the student planned to take. This, of course, would have followed more closely the seniors' aspirations. However, for the total group, additional types of courses enabled them to follow more closely a program designed for their aspirations. By referring to Appendix D and the weights assigned to the answers for each question, similar indications may be derived for the other correlations.

In examining Table 37, an asterisk denotes a "false" negative correlation which is due to the manner in which the weights were assigned; e.g., high occupational level assigned a low numerical code; one dagger indicates the opposite, a "false" positive correlation.

Most of the variables mentioned as candidates for further study remained important. The reversal of the sign of the correlation coefficients of "number of colleges applied to" with the other variables strongly suggested that the "no-response" items were having considerable influence. Because of the possibility of large numbers in the "no-response" categories, a more detailed analysis is needed to decide the importance of this variable.

IV. SUMMARY OF ANALYSES

A. SUMMARY OF PHASE I (FREQUENCY DISTRIBUTIONS)

Section II of this report contains the frequency distributions and percentages of students answering the questions on the Senior Survey form. The following is a brief summary of the frequency and percentage distributions based upon approximately 95 percent of the State's 1967 public and private high school seniors.

1. Public School Seniors' Responses to the Senior Survey

The 1967 public school senior population included in the survey was composed of 23,556 (44.7 percent) boys and 25,910 (49.2 percent) girls. This is 93.9 percent of the 52,684 twelfth-grade membership at the end of the academic year 1966-67. The modal age for boys and girls was 18 years, the boys tending to be older than the girls. Almost five percent of the senior boys were 20 years old or older.

When asked, "When did you decide on what you want to do after high school," more seniors answered "Just this year" (33.8 percent) than any other option (Table 4); however, more than one-tenth of the students had made their decisions before the seventh grade. Later analyses indicated that those who decided early were also those who were more likely to have planned to attend college. More public school seniors were enrolled in a college preparatory program (43.4 percent) than in any other program (Table 8). More girls than boys were enrolled in commercial or business programs, and more boys than girls were in other vocational programs. About 70 percent of the students planned to continue their education in some way. About one-third (35.9 percent) of the public school seniors expected to enter a four-year college and about one-fifth (21.0 percent) of them planned to enter full-time, two-year college programs.

The two reasons given most frequently for not attending college (Table 3) were "grades not good enough" (24.9 percent) and "rather get a job" (24.4 percent). Ten percent of those not attending college reported that college was too expensive. Parents were considered the most important source of help in deciding on post-high school plans (Table 2).

The educational and socio-economic backgrounds of parents were considered in Questions 8 and 10 of the Senior Survey. About 60 percent of the mothers and 50 percent of the fathers had at least a high school education (Table 7); however, more than three times as many fathers as mothers had completed graduate school. There were no appreciable differences in the educational backgrounds of the parents of boys and the parents of girls. More of the fathers were skilled craftsmen or foremen (20 percent) than any other occupational classification (Table 9). The second largest category for the fathers was manager or executive (11.5 percent). More than half of the mothers were reported as housewives with no outside employment; 12.4 percent of the mothers were office workers. There was little difference (Table 9) in the occupations of the parents of boys and the parents of girls.

When asked what they wanted to be (Table 9), the boys chose Professions A, social worker, teacher, etc. (17.9 percent), skilled craftsmen or foremen (13.2 percent), and Professions B, lawyer, doctor, etc. (12.8 percent). Replies from senior girls indicated that 33.1 percent planned to be office workers and 23.4 percent would seek employment in Professions B positions.

Almost half (46 percent) of the seniors applied to only one college (Table 10). Analysis showed that these students tended to be ones with high ability who were accepted by their first-choice college. There was little difference between the numbers of colleges applied to by boys and by girls. Of the seniors applying to college, 11.5 percent had applied to more than three colleges. Almost 70 percent (69.2 percent) of the seniors who expected to attend college planned to enter a college located in Virginia. Approximately 38 percent of all seniors who planned to attend college preferred a four-year, State-controlled institution (Table 11).

Most of the students (70.8 percent) were accepted by their first-choice college (Table 12), and a slightly higher percentage of girls than boys were accepted. Most of the seniors (80.2 percent) also said they would attend their first-choice college (Table 13). This would indicate that as of May of their senior year an additional 9.4 percent expected to be accepted at their first-choice college.

About 86 percent of the seniors reported that a business, trade, or technical school was within commuting distance of home (Table 6). Seventy-nine percent lived near a junior or community college, and the same percent lived near a four-year college.

The seniors who planned to attend college were influenced in their choice of a college by the wishes of their parents, the reputation of the faculty, good intellectual atmosphere, and friendly social climate, in this order (Table 14).

2. Private School Seniors' Responses to the Senior Survey

The private school seniors included in the survey were composed of 1,926 (60.3 percent) boys and 1,268 (39.7 percent) girls. The boys were older than the girls (Table 19) and the age most often reported was 18 years (47.8 percent).

A majority (66.7 percent) of the private school seniors planned to attend four-year colleges (Table 15), and the percentage included more boys than girls—71.4 percent vs. 59.4 percent. Almost all (90.1 percent) of the private school seniors planned to continue their education in some manner. Eighty-two percent of the seniors were enrolled in college preparatory programs. The most frequently indicated reason, especially among boys, for not attending college was that grades were not good enough (Table 17). The persons exerting the greatest influence on post-high school plans were parents or other relatives (Table 16).

About half of the fathers and one-fourth of the mothers of the private school seniors had completed college (Table 21), and more than one-fifth of the fathers had attended graduate school. The most often reported occupational level for the fathers of private school seniors (Table 23) was manager or executive (24 percent), and another one-fourth of the fathers were reported employed in Professions A and Professions B. The mothers were most often reported as having no other employment except that of housewife (59 percent).

Most of the private school senior boys preferred Professions B, lawyer, doctor, etc. (28.2 percent) and Professions A, social worker, teacher, etc. (22.6 percent). The girls preferred Professions A (25.5 percent).

Twenty-one percent of the boys and 27.5 percent of the girls applied to only one college, and 16.4 percent of the boys and 20.3 percent of the girls applied to more than three colleges (Table 24). Less than 40 percent of the college-bound private school seniors planned to attend out-of-state colleges, and 83.4 percent planned to attend a four-year institution rather than another type of college (Table 25). Almost three-fourths of the private school seniors who applied to college were accepted by the college of their first choice (Table 26), and 72.7 percent of them said they planned to attend the college of their first choice (Table 27).

Most of the boys and girls (85.7 percent and 87.9 percent respectively) lived near a four-year college (Table 20). The reason most frequently given for choosing a particular college was the reputation of the faculty (Table 28).

B. SUMMARY OF PHASE II (RESULTS OF THE REGRESSION ANALYSES)

The results of the different regression analyses are summarized under the following questions:

1. What differences among boys and girls in the college and non-college groups were associated with whether they attended public or private high schools?

The private school seniors, especially the boys, indicated a higher level of occupational aspiration (Question 10) and a larger percentage of them planned to attend college (Table 31) than did the public school seniors. The private school seniors tended more toward a college preparatory high school program. Their parents had more formal education than public school seniors and tended toward the professional end of the occupational scale. The senior boys who attended private high schools and planned to enroll in college were older than the public school boys who planned to attend college, but the private school boys who did *not* plan to attend college were younger than the boys in the public school non-college group. Private school girls were slightly younger than public school girls, and private school seniors appeared to decide on future plans earlier than public school seniors.

2. What differences among public and private school seniors were attributable to whether they are boys or girls?

Girls were younger and ranked higher than boys in their high school graduating classes. Girls in the public schools tended more toward a college preparatory program than boys. However, boys had higher SCAT —Quantitative scores. Private and public high school girls who planned to attend college aspired to lower occupational levels than did the boys who expected to enter college.

3. What differences among boys and girls were associated with whether or not they planned to attend college?

The seniors who planned to attend college tended to come from high schools with larger graduating classes. They also tended to be younger and decided about future plans earlier than seniors who did not plan to attend college.

4. Were any other relationships between the different variables observed?

Correlation coefficients indicated possible relationships among certain variables (Table 33). The aspirations of the seniors were correlated positively with the educational levels of the fathers ($r = 0.21$). Those with the highest aspirations appeared to have decided on future plans earlier and to have applied to fewer colleges.

5. Which persons influenced the seniors in selecting their college?

The parents exerted the greatest influence on the seniors' decision as to which college to attend. High school counselors were rated second and teachers were rated third.

A substantial number of those helped "very much" by parents planned to attend four-year colleges, and those influenced "very little" by parents and by counselors did not plan any post-high school training.

6. Did the seniors tend to be accepted by the college of their first choice, and to what other variables could their acceptance be attributed?

Most seniors reported that they planned to attend the college of their first choice. Unfortunately, the research model and the organization and degree of completeness of the raw data were insufficient to answer the second part of the question. Further analysis is recommended.

7. What were the characteristics of those seniors who applied to one or more colleges but who reported that they would not attend any college, and how did they compare with all college applicants?

The seniors who applied for admission to college, but reported that they would not attend, had mean scores on SCAT and SAT significantly lower than those of the total college applicants (Table 36). The mean rank in high school class, as well as the mean educational level of both the fathers and mothers of this group, was also significantly lower than those of the total college applicants.

V. RECOMMENDATIONS FOR FURTHER STUDY

The 1967 Senior Survey was a first attempt to determine the backgrounds, abilities, and goals of Virginia's high school seniors. Recommendations for further investigation include (1) additional study and analysis of the 1967 Senior Survey data and (2) replication of the survey in May of 1970.

Additional studies have been and are being conducted with the 1967 Senior Survey data. The Division of Educational Research and Statistics, in cooperation with the College Entrance Examination Board, is conducting a follow-up study of those seniors who completed one or more CEEB Advanced Placement examinations to determine to what extent these students have been able to benefit from Advanced Placement courses in high school. Among other results, a questionnaire returned from colleges in which 705 Advanced Placement students were enrolled indicated that advanced placement or degree credit was given on 52.7 percent of the examinations submitted. A second purpose of the Advanced Placement study is to determine how many (if any) other seniors in Virginia might profit from Advanced Placement courses.

At least one university has been able to make use of the data from the survey,[1] and other colleges or universities are invited to conduct similar studies using the Senior Survey as a data base.

It is recommended that follow-up studies be conducted of random samples of seniors who completed the 1967 Senior Survey. Examples of questions which might be answered in such studies are: Did most of the students who took college preparatory high school programs actually enter college, and do their college grades indicate that they were better prepared in some academic areas than in others? Did students in vocational programs in high school tend to enter vocations for which they were trained, and how does their success compare with students who did not pursue vocational programs in high school? These questions are a few of the many which could and should be asked through follow-up studies.

The Senior Survey form has been revised and is to be administered in May of 1970 (Appendix L). Changes in the form were made so that certain answers would be more meaningful. The replication of the survey will provide up-to-date information on the background, ability, and plans of the 1970 seniors, and when compared with the 1967 survey results, will indicate trends in the various factors measured by the survey.

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[1] Alton L. Taylor, "A Survey of Spring 1967 Graduates from Virginia Public Schools Who Entered the University of Virginia in the Fall of 1967, in Relation to Parental Backgrounds and Selected Factors Influencing the Decision to Attend the University of Virginia," Office of Institutional Analysis, University of Virginia, Charlottesville, 1968.

APPENDIXES

APPENDIX A

FORM ER1-67

VIRGINIA STATE DEPARTMENT OF EDUCATION
SENIOR SURVEY

STUDENT NAME ____________________
SCHOOL NAME ____________________
COUNTY/CITY NAME ____________________

1. What Are Your Plans After Graduation? (Mark One)

- ☐ Job and Go to School Part-Time
- ☐ Full-Time Job
- ☐ Business, Trade, or Technical School
- ☐ Four Year College
- ☐ Academic Program at a Junior or Community College
- ☐ Vocational or Technical Program at a Junior or Community College
- ☐ Housewife
- ☐ Military Service
- ☐ Other
- ☐ No Definite Plans Right Now

2. To What Extent Did the Following Persons Help You in Deciding on Your Plans After High School? (Mark One Response For Each Item)

Very Much	Some	Very Little or None	
☐	☐	☐	Parent or Other Relative
☐	☐	☐	High School Teachers
☐	☐	☐	High School Counselor
☐	☐	☐	High School Principal
☐	☐	☐	Students on College Campus
☐	☐	☐	Classmates or Friends
☐	☐	☐	Other Adults

3. If You Are Not Definitely Planning To Go To College, What is the One Most Likely Reason? (Mark One)

- ☐ It is Too Expensive
- ☐ My Grades Are Not Good Enough
- ☐ My Parents Don't Believe I Should
- ☐ I'd Rather Get a Job
- ☐ I'd Rather Get Married
- ☐ Military Service
- ☐ Lack of Interest
- ☐ I Do Not Know

4. When Did You Decide on What You Want to Do after High School? (Mark One)

- ☐ I Have Not Decided Yet
- ☐ Just This Year
- ☐ In the 11th Grade
- ☐ In the 9th or 10th Grade
- ☐ In the 7th or 8th Grade
- ☐ Before the 7th Grade
- ☐ I Do Not Know

5. – Sex –

Male ☐ Female ☐

6. – Your Age –

16 or Under	17	18	19	20 or Over
☐	☐	☐	☐	☐

7. Are Any of the Following within Commuting Distance from Your Home? (Mark One Response for Each Item)

Yes	No	Do Not Know	
☐	☐	☐	Business, Trade, or Technical School
☐	☐	☐	Junior or Community College
☐	☐	☐	Four Year College

8. How Far Did Your Parents Go In School? (Mark One In Each Column)

Father	Mother	
☐	☐	Grade School
☐	☐	Some High School
☐	☐	Finished High School
☐	☐	Some College, Technical or Special Training
☐	☐	Graduated from College
☐	☐	Graduate School
☐	☐	I Do Not Know

9. Which One of the Following High School Programs Have You Taken? (Mark One Most Like Your Program)

- ☐ Commercial or Business
- ☐ College Preparatory
- ☐ General
- ☐ Vocational
- ☐ Other

10. – Occupations – (See Instructions)

Father	Mother	You Want To Be	
☐	☐	☐	Workman
☐	☐	☐	Service Worker
☐	☐	☐	Machine Operator
☐	☐	☐	Skilled Craftsman or Foreman
☐	☐	☐	Salesman or Agent
☐	☐	☐	Office Worker
☐	☐	☐	Farm Owner or Manager
☐	☐	☐	Owner of a Business
☐	☐	☐	Technician
☐	☐	☐	Artist, Entertainer or Athlete
☐	☐	☐	Elected or Appointed Official
☐	☐	☐	Manager / Executive
☐	☐	☐	Profession (A)
☐	☐	☐	Profession (B)
☐	☐	☐	Housewife and No Other Employment
☐	☐	☐	I Do Not Know

Answer Questions 11-15 Only If You Have Applied To College.

11. How Many Colleges Have You Applied To?

1	2	3	4	5	6 or more

12. List These Colleges in Order of Preference (See Instructions)

1st Choice		2nd Choice		3rd Choice	
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

13. What is the Status of These Applications? (Mark the One in Each that Applies)

– Choices – 1st	2nd	3rd	
☐	☐	☐	Accepted
☐	☐	☐	Rejected
☐	☐	☐	Standby or Unknown

14. Which One of these Colleges Will You Most Likely Attend?

- ☐ 1st Choice
- ☐ 2nd Choice
- ☐ 3rd Choice
- ☐ A College Other than 1, 2, or 3
- ☐ Probably Won't Go

15. To What Extent Did The Following Help You in Deciding on The College of Your First Choice? (Mark One Response for Each Item)

Very Much	Some	Very Little or None	
☐	☐	☐	Parents Want Me To Go There
☐	☐	☐	Parent, Relative, or Close Friend Went There
☐	☐	☐	Reputation of Faculty for Good Teaching
☐	☐	☐	Friendly Social Climate
☐	☐	☐	Emphasis on Religion
☐	☐	☐	Low Cost
☐	☐	☐	Good Athletic Program
☐	☐	☐	Coeducational
☐	☐	☐	It's Close to Home
☐	☐	☐	Want To Live Away From Home
☐	☐	☐	Friend(s) Is Going or Will Go There
☐	☐	☐	Offers Financial Assistance
☐	☐	☐	Good Intellectual Atmosphere
☐	☐	☐	Not Too Much Academic Competition
☐	☐	☐	Located in a Large Cosmopolitan Area

A			B			C			D			E			F		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9

STUDENTS: DO NOT WRITE IN
A – B – C – D – E – F

1 2

APPENDIX A—Continued

STATE DEPARTMENT OF EDUCATION
RICHMOND, VIRGINIA

Senior Survey

You are requested to participate in an important study concerned with the educational and occupational aspirations, plans, and decisions of students at the time of high school graduation.

The information you furnish will be used to prepare grouped data and analyses which should be helpful in the improvement of many kinds of opportunities for students.

This is not a test and cannot affect your grades. Please answer the questions as requested in the instructions. Answer truthfully as best you can.

Instructions

Mark your answers carefully in the correct spaces with a soft lead pencil (No. 2 lead preferred). Erase completely if you want to change your answer.

Instructions for Blocks 10 and 12

Block 10: Column for Father—which job among the list of jobs below is most like the kind of work your father or the male head of your home does? If he works on more than one job, choose the one in which he spends the most time. If your father is not living, is retired, or is not working, what was his occupation? *Look over the entire list of jobs below, then choose and mark one answer.*

Column for Mother—which job among the list of jobs below is most like the kind of work your mother or female guardian does? If she does housework in addition to outside work, choose only the outside work. *Look over the entire list of jobs below, then choose and mark one answer.*

Column for you—what occupation do you want to go into? *Look over the entire list of jobs below, then choose and mark one answer.*

Block 12: A special sheet on which several colleges and types of colleges have been listed and assigned numbers will be furnished to you. For each of the colleges to which you have applied (first, second, and third choices), please find the appropriate number and code it in the appropriate choice space. Examples are given on the special sheet.

LIST OF JOBS

WORKMAN—such as carpenter's helper, fisherman, longshoreman, miner, tenant farmer, farm laborer, helper in eating place, gardener, packing house worker.

SERVICE WORKER—such as maid, practical nurse, janitor, housekeeper, barber, beautician, mail carrier, sheriff, policeman, fireman, detective, guard.

MACHINE OPERATOR—such as for bulldozers, factory machines, bus or cab driver, brakeman, conductor, merchant marine, metal worker.

SKILLED CRAFTSMAN OR FOREMAN—such as carpenter, electrician, machinist, enlisted man in the armed forces, factory inspector, plumber, TV-radio repairman, house painter, auto mechanic.

SALESMAN OR AGENT—including manufacturer's representative, store clerk, real estate agent, insurance agent, demonstrator.

OFFICE WORKER—such as bank teller, bookkeeper, secretary, court clerk, typist, dispatcher, shipping clerk, telephone operator.

FARM OWNER OR FARM MANAGER—including ranch, orchard, vineyard or poultry farm.

OWNER OF A BUSINESS—such as jewelry store, laundry, fishing boat, service station, theatre, trucking company, department store, factory.

TECHNICIAN—such as draftsman, surveyor, dental hygienist, registered nurse, laboratory technician, dental assistant, assistant to engineer, mortician.

ARTISTS, ENTERTAINERS AND ATHLETES—such as actor, professional golfer or baseball player, writer, musician or composer, private music teacher.

ELECTED OR APPOINTED OFFICIALS—such as justice of the peace, judge, mayor, postmaster, congressman, diplomat, ambassador.

LIST OF JOBS—Continued

MANAGER OR EXECUTIVE—such as buyer, broker, contractor, officer in armed forces, manager of industry or bank, school administrator.

PROFESSIONS (A)—such as social worker, school teacher, editor, librarian, minister, pharmacist, airplane pilot, tax consultant, civil engineer, aeronautical engineer, mechanical engineer, electrical engineer.

PROFESSIONS (B)—such as lawyer, architect, dentist, doctor, professor, scientist.

HOUSEWIFE—no other employment.

APPENDIX B

COMMONWEALTH OF VIRGINIA
STATE BOARD OF EDUCATION
RICHMOND, VIRGINIA 23216

May 1, 1967

TO: High School Principals

FROM: Charles E. Clear, Director of Educational Research and Statistics

SUBJECT: Survey of Educational or Occupational Plans of High School Seniors

In his memorandum to Division Superintendents, numbered 5045 and dated April 4, 1967, Dr. Woodrow W. Wilkerson, Superintendent of Public Instruction, informed all division superintendents of a survey designed to secure information about the educational or occupational plans of seniors following graduation.

The Division of Educational Research, as directed in the memorandum, is mailing to you under separate cover, optical scanner survey forms to be completed in accord with the enclosed instructions. These survey forms should be returned to me at the State Department of Education, Richmond, Virginia 23216, on or before June 1, 1967 for processing and analysis.

Your cooperation, which is so essential to the success of this important study, would be greatly appreciated.

CEC/sjs
Enclosures

———— Return mailing instructions

———— Instructions for completing Senior Survey Form ER1-67

———— List of Colleges and Code Numbers

———— Senior Survey Form ER1-67

APPENDIX B—Continued

COMMONWEALTH OF VIRGINIA
STATE DEPARTMENT OF EDUCATION

Special Instructions

QUESTION 15—SENIOR SURVEY FORM ER1-67

Please call to the attention of your students that Question 15 should read, "To what extent did the following help you in deciding on *the college of your first choice?*" (Mark one response for each item.)

COMMONWEALTH OF VIRGINIA
STATE DEPARTMENT OF EDUCATION

SENIOR SURVEY FORM ER1-67

Instructions

Preface

The purpose of these instructions is to acquaint the principal or counselors and teachers appointed by him, as to the proper method for completing the Senior Survey Form ER1-67. The magnitude of this survey (55,000 to 60,000 public and private high school seniors will participate in this study) requires the utmost in supervision by those administering the survey to insure minimum data collection error, in order that a valid study analysis can be made.

A. General

1. Forms should be marked with a soft lead pencil, a No. 2 is best. Do not use ink, ballpoint pens or colored pencils.
2. If wrong response is marked, erase thoroughly and fill in correct response block.
3. Do not fold or staple the forms.

B. Instructions for individual items to be coded

1. Item 12 requires the complete code for each institution. Be certain that zero entries are entered accordingly. Examples:

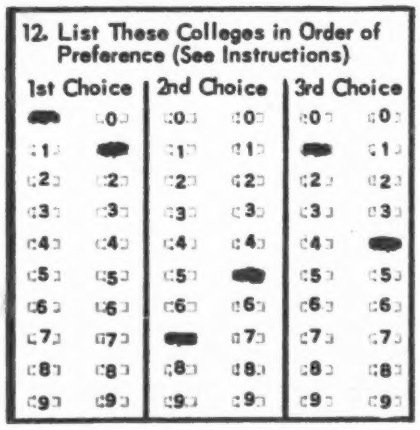
   First Choice—University of Virginia, code number 01.

   Second Choice—University of Kentucky, code number 75.

   Third Choice—Blue Ridge Community College, code number 14.

   A list of the colleges and the code numbers to be used in completing item 12 are furnished on a separate sheet.

2. Items A-B-C-D-E-F, the shaded area, are to be completed by persons designated by the principal.



12. List These Colleges in Order of Preference (See Instructions)

1st Choice		2nd Choice		3rd Choice	
●	0	0	0	0	0
1	●	1	1	●	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	●
5	5	5	●	5	5
6	6	6	6	6	6
7	7	●	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

a. Shaded blocks A, B, and C are for recording the Cooperative School and College Ability Test (SCAT) *converted scores.*

Block A = Verbal converted score
Block B = Quantitative converted score
Block C = Total converted score

When available the 11th grade SCAT scores are preferred. *In the event 11th grade scores are not available then the ninth-grade scores may be reported. If ninth-grade scores are reported, the space numbered one (1) in the section "Students Do Not Write in A-B-C-D-E-F" must be marked (blackened).*

b. Shaded blocks D and E are for recording students' College Entrance Examination Board's Scholastic Aptitude Test (SAT) *converted scores.*

Block D = Verbal converted score
Block E = Mathematics converted score

If scores are not available leave D and E blank.

c. Shaded block F is for recording students' rank in class. If his rank is greater than 999 please mark (blacken) response block No. 2 in the section "Students Do Not Write in A-B-C-D-E-F" for 1000 indication position and mark (blacken) response blocks

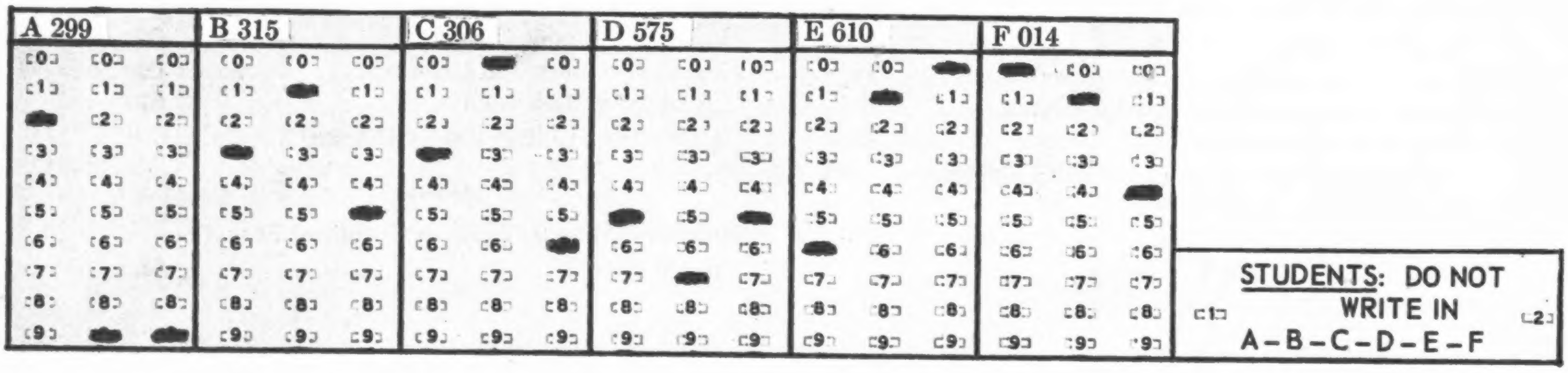
APPENDIX B—Continued

in F for the hundreds, tens and unit positions.

d. In the sections labeled A, B, C, D, E, F write the numbers to be marked (blackened) in the corresponding response positions below the numbers.

Example of A-B-C-D-E-F marking:

A student with a SCAT verbal converted score of 299, a quantitative converted score of 315, and a total converted score of 306 is coded in sections A, B, and C below. This student's SAT scores are: verbal converted score 575, and mathematics converted score 610. He ranks fourteenth (014) in his class.



LIST OF COLLEGES AND CODE NUMBERS

(To be used in completing Item 12 of Senior Survey Form ER1-67)

State-Controlled Institutions of Higher Education

Four-Year	Code No.
University of Virginia	01
Medical College of Virginia	02
Virginia Polytechnic Institute	03
William and Mary	04
Virginia Military Institute	05
Virginia State College	06
Mary Washington College	07
Radford College	08
Madison College	09
Longwood College	10
Old Dominion College	11
Richmond Professional Institute	12
George Mason College	13

Two-Year	Code No.
Blue Ridge Community College	14
Valley Vocational Technical School	15
Peninsula Voc. Tech. Educ. Center	16
Virginia Western Community College	17
Danville Technical Institute	18
John Tyler Community College	19
New River Vocational Technical School	20
Northern Virginia Community College	21
Washington County Voc.-Tech. School	22
Clinch Valley College	23
Eastern Shore Branch	24
Central Virginia Community College	25
Patrick Henry College	26
Clifton Forge-Covington Community College (Dabney S. Lancaster)	27
Danville Division (VPI)	28
Wytheville Community College	29
Christopher Newport College	30
Richard Bland College	31
The Technical Inst. of Old Dominion College	32

Privately Controlled Institutions of Higher Education

Four-Year	Code No.
Bridgewater College	33
Eastern Mennonite College	34
Emory and Henry College	35
Frederick College	36

Four-Year	Code No.
Hampden-Sydney College	37
Hampton Institute	38
Hollins College	39
Lynchburg College	40

APPENDIX B—Continued

Four-Year	Code No.
Mary Baldwin College	41
Presbyterian School of Christian Education	42
Protestant Episcopal Theol. Sem. in Virginia	43
Randolph-Macon College—Ashland	44
Randolph-Macon College—Lynchburg	45
Roanoke College	46
Saint Paul's College	47
Shenandoah Conservatory of Music	48
Stratford College	49
Sweet Briar College	50
Union Theological Seminary in Virginia	51
University of Richmond (Richmond College and University College)	52
Virginia Union University	53
Virginia Wesleyan College	54
Washington and Lee University	55
Institute of Textile Technology	56

Two-Year	Code No.
Averett College	57
Bluefield College	58
Ferrum Junior College	59
Marion College	60
Marymount College of Virginia	61
Shenandoah College and Con. of Music	62
Southern Seminary Junior College	63
Sullins College	64
Virginia Intermont College	65
Virginia Seminary and College	66
University of Richmond (University College Junior College)	67

Other

Business, Nursing, Trade or Technical School in Virginia	68

Codes for Regional Institutions of Higher Education—Outside Virginia

South	Code No.
District of Columbia	
George Washington University	69
Florida	
Florida State	70
Miami University	71
University of Florida	72
Georgia	
Georgia Tech	73
University of Georgia	74
Kentucky	
University of Kentucky	75
Maryland	
University of Maryland	76
United States Naval Academy	77
Mississippi	
Mississippi State	78
North Carolina	
Duke University	79
North Carolina State	80
University of North Carolina	81
Wake Forest College	82
North Carolina College at Durham	83
South Carolina	
Clemson University	84
University of South Carolina	85

South	Code No.
Tennessee	
University of Tennessee	86
Vanderbilt University	87
East Tennessee State University	88
West Virginia	
University of West Virginia	89
Other four (4) year colleges or universities in the South	90
Two (2) year colleges in the South	91

North	
United States Military Academy	92
Other four (4) year colleges or universities in the North	93
Two (2) year colleges in the North	94

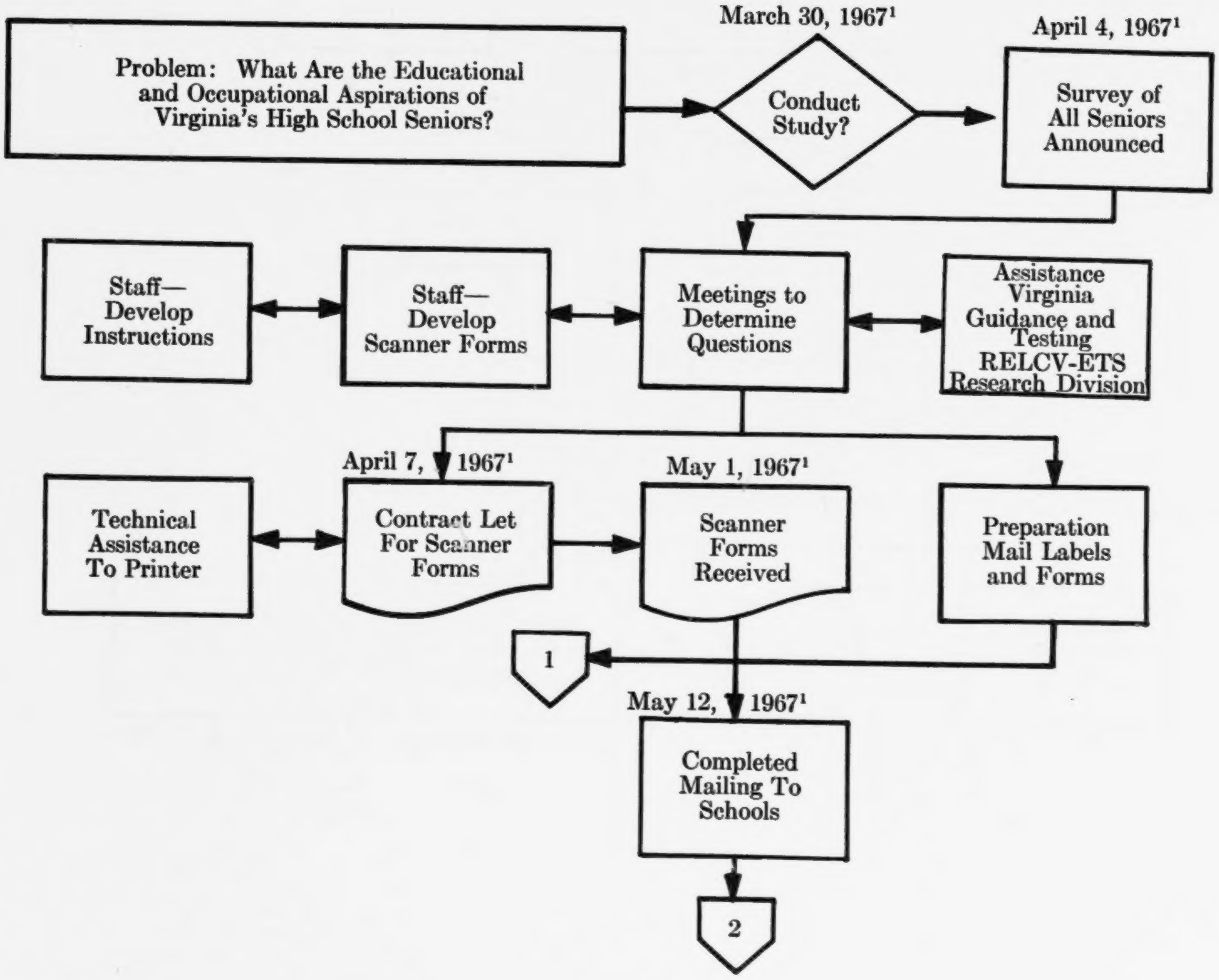
Mid-West	
Four (4) year colleges or universities in the Mid-West	95
Two (2) year colleges in the Mid-West	96

Far West	
United States Air Force Academy	97
Other four (4) year colleges or universities in the Far West	98
Two (2) year colleges in the Far West	99

Foreign Countries	
Code all schools outside the United States as	00

APPENDIX C

FLOW CHART: VIRGINIA SENIOR SURVEY



Problem: What Are the Educational and Occupational Aspirations of Virginia's High School Seniors?
March 30, 1967[1]
Conduct Study?
April 4, 1967[1]
Survey of All Seniors Announced
Staff— Develop Instructions
Staff— Develop Scanner Forms
Meetings to Determine Questions
Assistance Virginia Guidance and Testing RELCV-ETS Research Division
April 7, 1967[1]
Technical Assistance To Printer
Contract Let For Scanner Forms
May 1, 1967[1]
Scanner Forms Received
Preparation Mail Labels and Forms
1
May 12, 1967[1]
Completed Mailing To Schools
2

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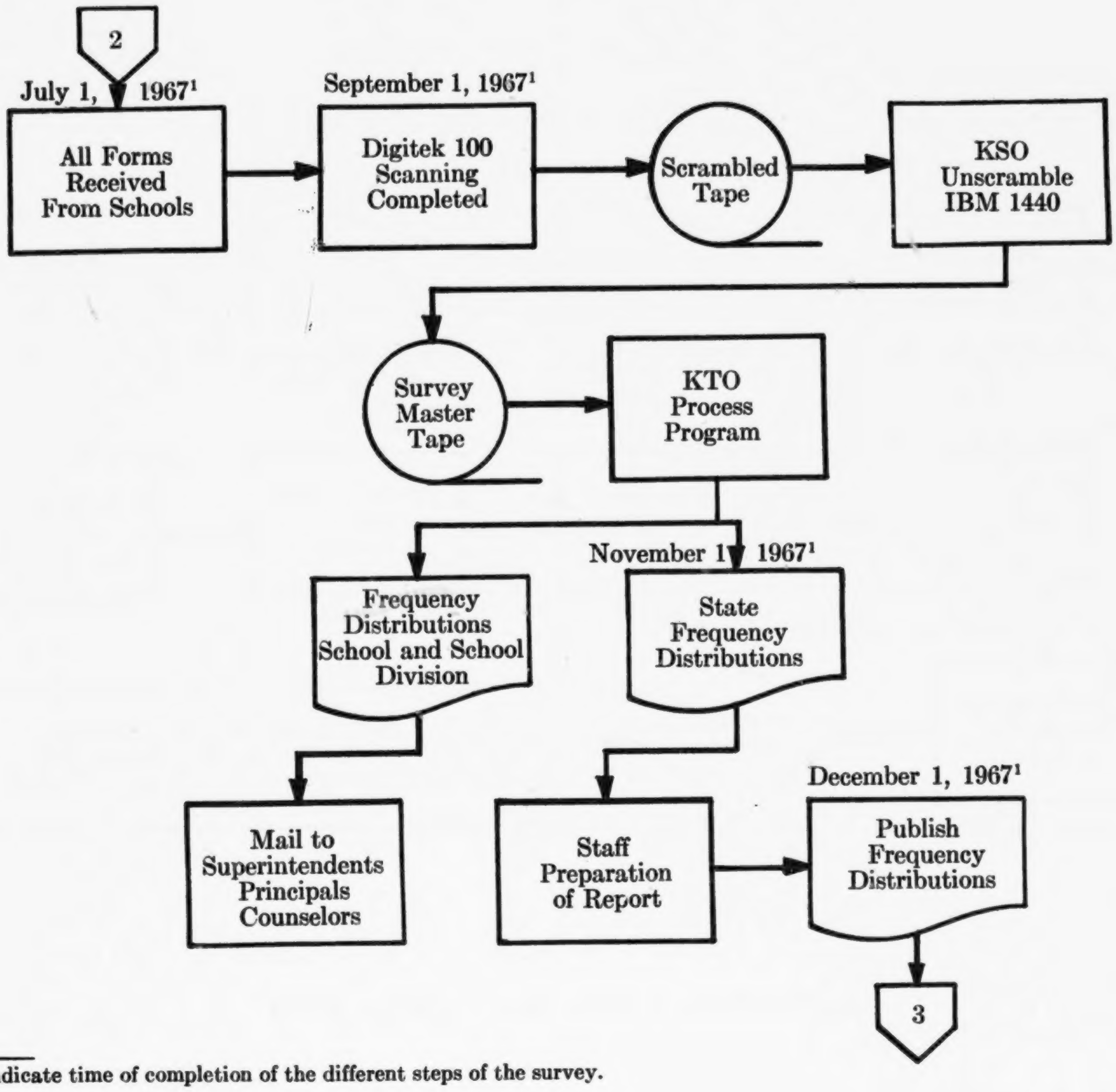
[1] Dates indicate time of completion of the different steps of the survey.

APPENDIX C—Continued

FLOW CHART: VIRGINIA SENIOR SURVEY—CONTINUED


2
July 1, 1967[1]
All Forms Received From Schools
September 1, 1967[1]
Digitek 100 Scanning Completed
Scrambled Tape
KSO Unscramble IBM 1440
Survey Master Tape
KTO Process Program
Frequency Distributions School and School Division
November 1, 1967[1]
State Frequency Distributions
Mail to Superintendents Principals Counselors
Staff Preparation of Report
December 1, 1967[1]
Publish Frequency Distributions
3

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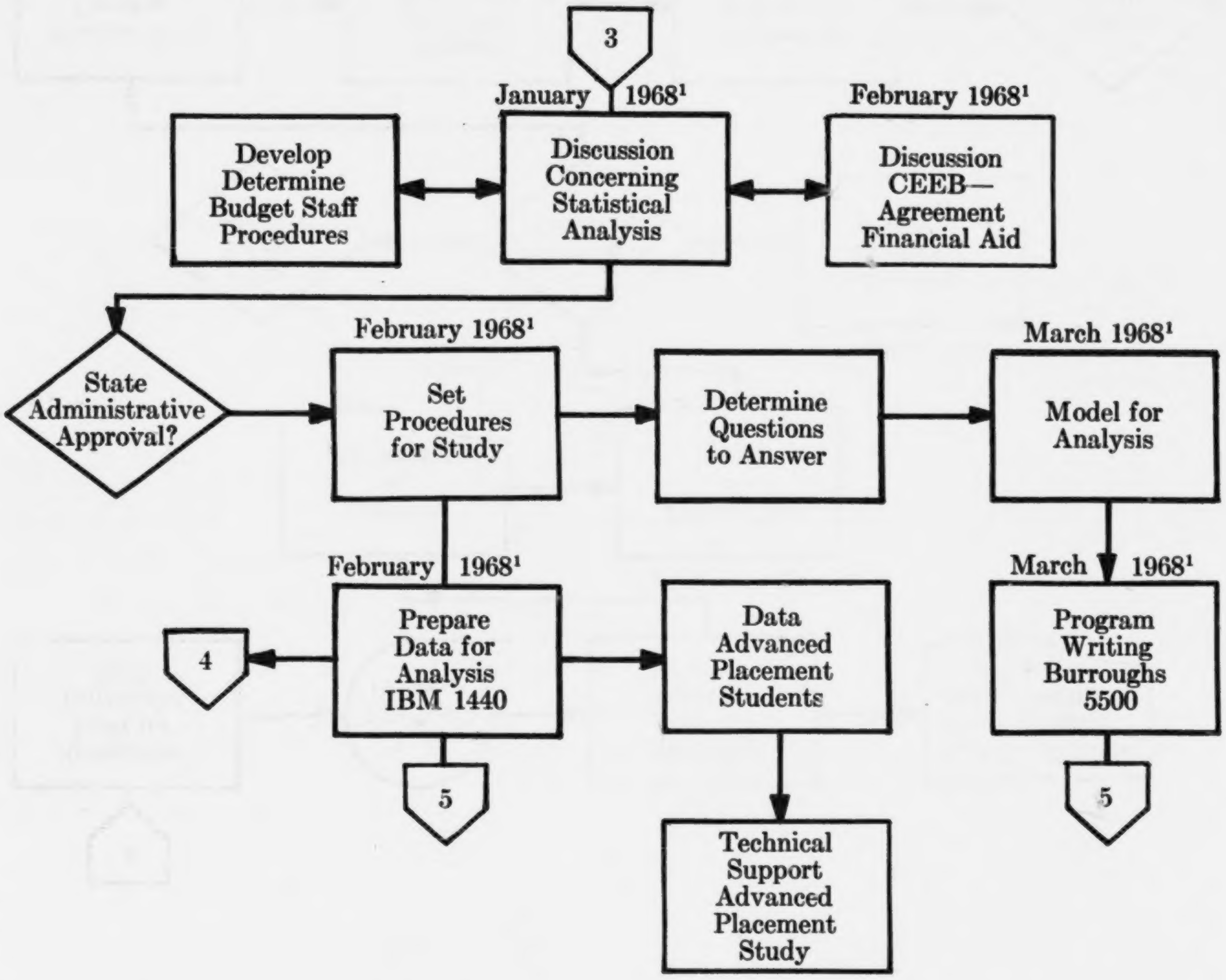
[1] Dates indicate time of completion of the different steps of the survey.

APPENDIX C—Continued

FLOW CHART: VIRGINIA SENIOR SURVEY—Continued


3
January 1968[1]
February 1968[1]
Develop Determine Budget Staff Procedures
Discussion Concerning Statistical Analysis
Discussion CEEB—Agreement Financial Aid
February 1968[1]
March 1968[1]
State Administrative Approval?
Set Procedures for Study
Determine Questions to Answer
Model for Analysis
February 1968[1]
March 1968[1]
4
Prepare Data for Analysis IBM 1440
Data Advanced Placement Students
Program Writing Burroughs 5500
5
5
Technical Support Advanced Placement Study

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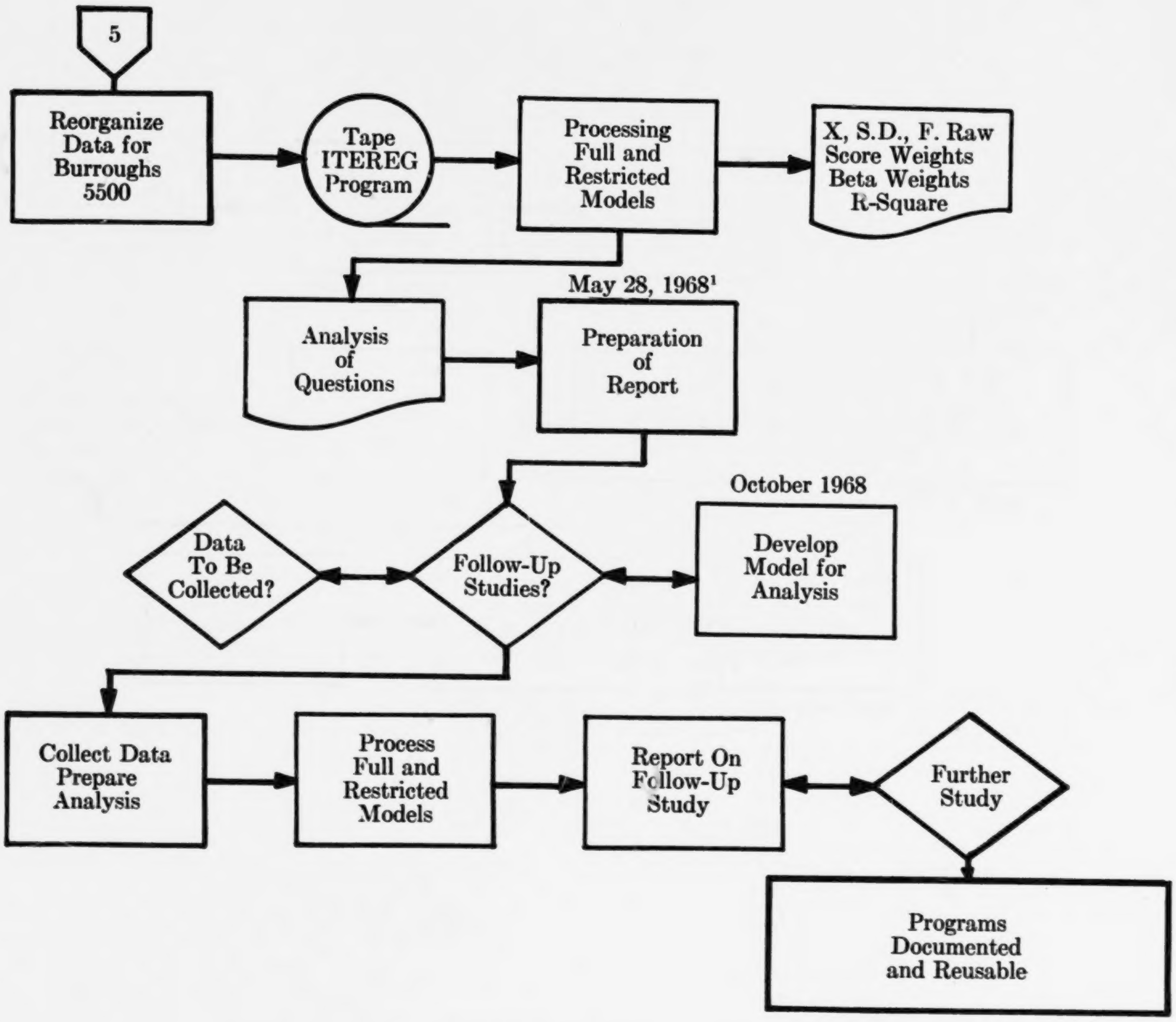
[1] Dates indicate time of completion of the different steps of the survey.

APPENDIX C—Continued

FLOW CHART: VIRGINIA SENIOR SURVEY—CONTINUED


5
Reorganize Data for Burroughs 5500
Tape ITEREG Program
Processing Full and Restricted Models
X, S.D., F. Raw Score Weights Beta Weights R-Square
Analysis of Questions
May 28, 1968[1]
Preparation of Report
October 1968
Data To Be Collected?
Follow-Up Studies?
Develop Model for Analysis
Collect Data Prepare Analysis
Process Full and Restricted Models
Report On Follow-Up Study
Further Study
Programs Documented and Reusable

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[1] Dates indicate time of completion of the different steps of the survey.

APPENDIX D

FORM ER1-67

VIRGINIA STATE DEPARTMENT OF EDUCATION
SENIOR SURVEY

STUDENT NAME ______
SCHOOL NAME ______
COUNTY/CITY NAME ______

1. What Are Your Plans After Graduation? (Mark One)

- 3 Job and Go to School Part-Time
- 4 Full-Time Job
- 3 Business, Trade, or Technical School
- 1 Four Year College
- 2 Academic Program at a Junior or Community College
- 2 Vocational or Technical Program at a Junior or Community College
- 4 Housewife
- 4 Military Service
- 4 Other
- 5 No Definite Plans Right Now

2. To What Extent Did the Following Persons Help You in Deciding on Your Plans After High School? (Mark One Response For Each Item)

Very Much	Some	Very Little or None	
1	2	3	Parent or Other Relative
1	2	3	High School Teachers
1	2	3	High School Counselor
1	2	3	High School Principal
1	2	3	Students on College Campus
1	2	3	Classmates or Friends
1	2	3	Other Adults

3. If You Are Not Definitely Planning To Go To College, What is the One Most Likely Reason? (Mark One)

- 1 It is Too Expensive
- 2 My Grades Are Not Good Enough
- 3 My Parents Don't Believe I Should
- 4 I'd Rather Get a Job
- 5 I'd Rather Get Married
- 6 Military Service
- 7 Lack of Interest
- 8 I Do Not Know

4. When Did You Decide on What You Want to Do after High School? (Mark One)

- 6 I Have Not Decided Yet
- 5 Just This Year
- 4 In the 11th Grade
- 3 In the 9th or 10th Grade
- 2 In the 7th or 8th Grade
- 1 Before the 7th Grade
- 7 I Do Not Know

5. – Sex –

Male 1 Female 2

6. – Your Age –

16 or Under 1 17 2 18 3 19 4 20 or Over 5

7. Are Any of the Following within Commuting Distance from Your Home? (Mark One Response for Each Item)

Yes	No	Do Not Know	
1	2	3	Business, Trade, or Technical School
1	2	3	Junior or Community College
1	2	3	Four Year College

8. How Far Did Your Parents Go In School? (Mark One In Each Column)

Father		Mother	
☐	6	☐	Grade School
☐	5	☐	Some High School
☐	4	☐	Finished High School
☐	3	☐	Some College, Technical or Special Training
☐	2	☐	Graduated from College
☐	1	☐	Graduate School
☐	7	☐	I Do Not Know

9. Which One of the Following High School Programs Have You Taken? (Mark One Most Like Your Program)

- 2 Commercial or Business
- 1 College Preparatory
- 3 General
- 4 Vocational
- 5 Other

10. – Occupations – (See Instructions)

Father	Mother		You Want To Be	
☐	☐	7	☐	Workman
☐	☐	7	☐	Service Worker
☐	☐	6	☐	Machine Operator
☐	☐	5	☐	Skilled Craftsman or Foreman
☐	☐	3	☐	Salesman or Agent
☐	☐	4	☐	Office Worker
☐	☐	2	☐	Farm Owner or Manager
☐	☐	3	☐	Owner of a Business
☐	☐	3	☐	Technician
☐	☐	3	☐	Artist, Entertainer or Athlete
☐	☐	1	☐	Elected or Appointed Official
☐	☐	1	☐	Manager / Executive
☐	☐	2	☐	Profession (A)
☐	☐	1	☐	Profession (B)
☐	☐	4	☐	Housewife and No Other Employment
☐	☐	8	☐	I Do Not Know

Answer Questions 11 - 15 Only If You Have Applied To College.

11. How Many Colleges Have You Applied To?

1 2 3 4 5 6 or more

12. List These Colleges in Order of Preference (See Instructions)

1st Choice		2nd Choice		3rd Choice	
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

13. What is the Status of These Applications? (Mark the One in Each that Applies)

– Choices – 1st	2nd	3rd	
1	1	1	Accepted
2	2	2	Rejected
3	3	3	Standby or Unknown

14. Which One of these Colleges Will You Most Likely Attend?

- 1 1st Choice
- 2 2nd Choice
- 3 3rd Choice
- 4 A College Other than 1, 2, or 3
- 5 Probably Won't Go

15. To What Extent Did The Following Help You in Deciding on The College of Your First Choice? (Mark One Response for Each Item)

Very Much	Some	Very Little or None	
1	2	3	Parents Want Me To Go There
1	2	3	Parent, Relative, or Close Friend Went There
1	2	3	Reputation of Faculty for Good Teaching
1	2	3	Friendly Social Climate
1	2	3	Emphasis on Religion
1	2	3	Low Cost
1	2	3	Good Athletic Program
1	2	3	Coeducational
1	2	3	It's Close to Home
1	2	3	Want To Live Away From Home
1	2	3	Friend(s) Is Going or Will Go There
1	2	3	Offers Financial Assistance
1	2	3	Good Intellectual Atmosphere
1	2	3	Not Too Much Academic Competition
1	2	3	Located in a Large Cosmopolitan Area

A			B			C			D			E			F		
SCAT-VERBAL			SCAT-QUANT.			SCAT TOTAL			SAT VERBAL			SAT MATH			RANK		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9

– Rank –

1 **STUDENTS: DO NOT WRITE IN** 2

A – B – C – D – E – F

APPENDIX E

EXPLANATION OF CODES FOR DIFFERENT VARIABLES

VARIABLE NUMBER — **VARIABLE**

A. SENIOR ASPIRATIONS

1 Code Aspirations According to the following: (Question 1)[1]

1. Attend four-year college (public school seniors)
2. Attend two-year college
3. Attend some kind of trade or technical school
4. Attend no kind of school
5. No definite plans and no response
6. Attend four-year college (private school seniors)
7. Attend two-year college
8. Attend some kind of trade or technical school
9. Attend no kind of school
10. No definite plans and no response

2 Code "Wanted To Be" by A. B. Hollingshead's (1965) Code as Follows: (Question 10)

1. Profession (B)
   Manager or Executive
   Elected or Appointed Official
2. Farm owner or manager
   Profession (A)
3. Artists, entertainers and athletes
   Owner of a business
   Salesman or agent
   Technician
4. Office worker
   Housewife
5. Skilled craftsman or foreman
6. Machine operator
7. Service worker
   Workman
8. Do not know and no response

B. SCHOOL RELATED FACTORS

3 Code School Division by the following:

1. Large urban
2. Large rural
3. Medium urban
4. Medium rural
5. Small urban
6. Small rural

4 Number of Seniors—Boys—June, 1967

5 Number of Seniors—Girls—June, 1967

6 Number of Seniors—Total—June, 1967

7 Number of Seniors Going to College—Boys

8 Number of Seniors Going to College—Girls

9 Number of Seniors Going to College—Total

10 Percent of Senior Class Going to College—Boys

11 Percent of Senior Class Going to College—Girls

12 Percent of Senior Class Going to College—Total

13 Code Type of Program According to the following: (Question 9)

1. College preparatory program
2. Commercial or business program
3. General program
4. Vocational program
5. Other program and no response

C. PERSONAL AND SOCIAL FACTORS

14 Age (Question 6)

1. 16 or under
2. 17
3. 18
4. 19
5. 20 or over

15 Sex (Question 5)

1. Boy
2. Girl

16 Code Occupational Level of Father by A. 2 (See Variable Number 2) (Question 10)

17 Code Occupational Level of Mother by A. 2 (See Variable Number 2) (Question 10)

18 Code Educational Level of Father by A. B. Hollingshead's Code as Follows: (Question 8)

1. Graduate school
2. Graduated from college
3. Some college, technical or special training

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[1] Question numbers refer to Senior Survey form, Appendix A.

APPENDIX E—Continued

VARIABLE NUMBER — VARIABLE

4. Finished high school
5. Some high school
6. Grade school
7. Do not know and no response

19 Code Educational Level of Mother by C. 18 (Variable 18) (Question 8)

D. SCHOLASTIC FACTORS

20 SCAT Score A—Verbal

21 SCAT Score B—Quantitative

22 SCAT Score C—Total

23 Student Rank—Percentile

24 Code Time Factors by the Following Code: (Question 4)
  1. Decided before seventh grade
  2. Decided in the seventh or eighth grade
  3. Decided in the ninth or tenth grade
  4. Decided in the eleventh grade
  5. Decided just this year
  6. Have not decided yet
  7. Do not know and no response

E. WHO INFLUENCED DECISION? (Question 2)

25 Parent
  1. Very much
  2. Some
  3. Very little

26 High School Teachers
  1. Very much
  2. Some
  3. Very little

27 High School Counselor
  1. Very much
  2. Some
  3. Very little

28 High School Principal
  1. Very much
  2. Some
  3. Very little

29 Students on College Campus
  1. Very much
  2. Some
  3. Very little

VARIABLE NUMBER — VARIABLE

30 Classmates or Friends
  1. Very much
  2. Some
  3. Very little

31 Other Adults
  1. Very much
  2. Some
  3. Very little

F. INFORMATION ON PROXIMITY OF SCHOOLS (Question 7)

32 Business, Trade, or Technical School
  1. Near
  2. Not near
  3. Do not know

33 Junior or Community College
  1. Near
  2. Not near
  3. Do not know

34 Four-Year College
  1. Near
  2. Not near
  3. Do not know

G. REASONS FOR NOT GOING TO COLLEGE

35 Reasons for Not Going to College (Question 3)
  1. Too expensive
  2. Grades are not good enough
  3. Parents do not believe I should
  4. Rather get a job
  5. Rather get married
  6. Military service
  7. Lack of interest
  8. Do not know and no response

H. COLLEGE FACTORS

36 Number of Colleges Applied to: (Question 11)
  1. One
  2. Two
  3. Three
  4. Four
  5. Five
  6. Six or more

37 Code of First-Choice College

38 Code of Second-Choice College

APPENDIX E—Continued

Variable Number — VARIABLE

39 Code of Third-Choice College

I. Status of College Applications (Question 13)

40 First Choice
  1. Accepted
  2. Rejected
  3. Unknown and no response

41 Second Choice
  1. Accepted
  2. Rejected
  3. Unknown and no response

42 Third Choice
  1. Accepted
  2. Rejected
  3. Unknown and no response

43 Which College Will You Attend? (Question 14)
  1. First choice
  2. Second choice
  3. Third choice
  4. Another choice
  5. Probably will not go and no response

J. What Helped in Making Plans for College? (Question 15)

44 Parents Want Me to Go There
  1. Very much
  2. Some
  3. Very little

45 Parent, Relative, or Friends Went There
  1. Very much
  2. Some
  3. Very little

46 Reputation of Faculty for Good Teaching
  1. Very much
  2. Some
  3. Very little

47 Friendly Social Climate
  1. Very much
  2. Some
  3. Very little

48 Emphasis on Religion
  1. Very much
  2. Some
  3. Very little

Variable Number — VARIABLE

49 Low Cost
  1. Very much
  2. Some
  3. Very little

50 Good Athletic Program
  1. Very much
  2. Some
  3. Very little

51 Co-educational
  1. Very much
  2. Some
  3. Very little

52 Close to Home
  1. Very much
  2. Some
  3. Very little

53 Want to Live Away From Home
  1. Very much
  2. Some
  3. Very little

54 Friend Is Going or Is There
  1. Very much
  2. Some
  3. Very little

55 Offers Financial Assistance
  1. Very much
  2. Some
  3. Very little

56 Good Intellectual Atmosphere
  1. Very much
  2. Some
  3. Very little

57 Not Too Much Academic Competition
  1. Very much
  2. Some
  3. Very little

58 Located in Large, Cosmopolitan Area
  1. Very much
  2. Some
  3. Very little

59 SAT Score—Verbal

60 SAT Score—Math

APPENDIX F

EXPLANATION OF THE SENIOR SURVEY ANALYSIS BY THE APPLIED MULTIPLE LINEAR REGRESSION TECHNIQUE

Information on the tape used in analyzing data for the Senior Survey came from the Master Tape which was built from data collected on the Virginia State Department of Education Senior Survey Form (Appendix A).

In order to facilitate the analysis by regression, the information was organized on the tape in the following categories:

A. Senior Aspirations
B. School Related Factors
C. Personal and Social Factors
D. Scholastic Factors
E. Decision Factors
F. Factors Relating to the Proximity of Schools
G. Factors Relating to the Reasons for Not Going to College
H. College Factors

The information on the tape was of two types, coded and continuous. Most of the information was of the coded type and was used to generate categorical vectors for analysis using the Applied Multiple Linear Regression Approach.[1] The generating and subsequent data analysis was done using a vector-generated program "GENVEC" and an iterative multiple regression program "ITEREG" with the Burroughs 5500 computer at the University Computer Science Center, Charlottesville, Virginia.

The proper use of the Applied Linear Regression approach to data analysis depends upon the careful formulation of models which are based upon the questions to which answers are sought. These models are referred to as full models and restricted models.[2] The full model is constructed to fit the given question, and such restrictions are placed on this model as are required to answer that question. Predictions based on the two models are then compared for the size of the error of prediction, and on the basis of an F-test of this comparison, the significance of any differences is determined.[3]

In the case of the Senior Survey, these models required combinations of data that could not have been easily anticipated in constructing the survey form, and consequently, a generating program was required which did away with the necessity of writing a new program for each problem situation that arose. The program "GENVEC" was written to generate vectors for use with "ITEREG" in answering questions using full and restricted models, although its use was not restricted to this. "GENVEC" was also used to generate vectors from which means and standard deviations, as well as percentages, of categories were derived.

For the reader who is interested, the models used in the data analysis are included in subsequent appendixes to this report, and further information about the formulation of such models can be found in the technical publication already cited in this appendix. A computer program is essential to the use of these models; however, they will be of little practical value to one who does not have access to such a program.

Appendix E contains the codes for the tape used in the analyses reported here. A brief discussion of this key and one illustration of the way "GENVEC" can be used are included for the reader who is interested in pursuing the technical details of the method of data analysis.

Variables 1 and 2 (Appendix E) deal with what the seniors who were surveyed aspired to become. Item 1 gives information regarding the educational aspirations and information relating to the type of school attended —public or private. Item 2 gives information about what the seniors hoped to be. The code for item 1 was designed primarily for category generation, although it is possible to get some information by treating it as a coded criterion vector. The code for item 2 was taken from A. B. Hollingshead,[4] and the vector can be treated as a coded criterion vector or it can be used to generate categories.

Items 3 through 13 deal with school-related factors. Since items 4 through 12 are numeric measures, they were treated as continuous vectors. Items 3 and 13 were coded to generate categories, but if care is taken in interpretation, they can be treated as coded criterion vectors. Items 14 through 19 deal with personal and social factors. Items 14 and 15 were coded to generate categories, but there is some meaning in using item 14 as a coded criterion vector. Items 16 and 17 give the occupational level of the father and mother, respectively. The code used here is the same as that used for item 2.[5] Items 18 and 19 give the educational level of the father and the mother, respectively. The code used here is also from Hollingshead.[6] Items 16 through

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[1] Robert A. Bottenberg, *et al.*, *Applied Multiple Linear Regression Technical Documentary Report* PRL-TDR-63-6 (Lackland AFB, Texas: Available from Defense Documentation Center, Defense Supply Agency, 1963).

[2] *Ibid.*, pp. 43-48.

[3] *Ibid.*

[4] August B. Hollingshead, *Two Factor Index of Social Position*, 1965 Yale Station, New Haven, Connecticut (Price $1.00).

[5] *Ibid.*

[6] *Ibid.*

19 were designed to generate categories, but they can be treated as coded criterion vectors.

Items 20 through 23 deal with scholastic factors. The verbal score on the Scholastic Aptitude Test is item 20. Item 21 is the SCAT quantitative score. Item 22 is the total SCAT score. Item 23 gives the student's high school rank. These vectors were treated as continuous variables in the analyses. Items 24 through 31 deal with decision factors. The "time a decision was made as to what the senior aspired to" is recorded by code in item 24. While coded to generate categories, this item can be treated as a coded criterion vector. Items 25 through 31 deal with "who influenced the decision," coded by the extent to which they influenced the decision. These codes were designed to generate categories, but when used separately, the vectors can be treated as coded criterion vectors.

Items 32 through 34 deal with factors related to "type of school" coded to give information relating to the proximity of the schools. These vectors were designed to generate categories. Item 35 deals with the "reasons for not going to college." This item was coded to generate categories but may be used as a coded criterion if care in such use is exercised.

Items 36 through 58 deal with factors related to the aspiration to a college education. Item 36 simply gives the number of colleges applied to. This information can be used to generate categories, or it can be treated as a continuous criterion vector. Items 37 through 39 give the code for the first, second, and third choice of college. The code here corresponds to the code-sheet given the respondent when he filled out the survey form. This information was used to generate categories of colleges. Items 40 through 42 deal with the status of the first-, second-, and third-choice applications. This information was designed to generate categories. Item 43 gives the choice of college the senior planned to attend. This item was designed to generate categories but can be meaningfully used as a coded criterion vector. Items 44 through 58 deal with what influenced the decision to attend college, coded by the extent to which the decision was influenced. This information was designed to generate categories, but the items may be used separately as coded criterion vectors. Items 59 and 60 give the scholastic aptitude test verbal and math scores respectively.

To get some idea of how "GENVEC" and "ITEREG" work, suppose that it is desired to know whether there are differences by urban-rural classification and by size of school when the criterion is "what the seniors wanted to be." The input data for "GENVEC" is item 3, which is used to generate categories, and item 2, which is to serve as the criterion. The full regression model for "ITEREG" consists of the seven categories of information with the coded vector representing "what the seniors wanted to be" serving as the criterion. Mathematically, this full model would be expressed as

$$Y = a_1x_1 + a_2x_2 + a_3x_3 + a_4x_4 + a_5x_5 + a_6x_6 + a_7x_7 + E_1$$

where $a_1 - a_7$ are regression weights and

x_1 = 1 if the criterion measure is from a student in a large urban school; 0 otherwise
x_2 = 1 if the criterion measure is from a student in a large rural school; 0 otherwise
x_3 = 1 if the criterion measure is from a student in a medium-sized urban school; 0 otherwise
x_4 = 1 if the criterion measure is from a student in a medium-sized rural school; 0 otherwise
x_5 = 1 if the criterion measure is from a student in a small urban school; 0 otherwise
x_6 = 1 if the criterion measure is from a student in a small rural school; 0 otherwise
x_7 = 1 if there was no response; 0 otherwise.

The first test might be one to see if the no-response items have a significant influence. The regression model for this test would simply leave out this bit of information. The restriction would be that

$$a_7 = 0$$

and the restricted model would be

$$Y = a_1x_1 + a_2x_2 + a_3x_3 + a_4x_4 + a_5x_5 + a_6x_6 + E_2$$

A comparison of E_1 and E_2 by an F-test would answer our question as to whether the no responses are important enough to be considered. Assume they are of negligible importance. The full model for "ITEREG" can now become

$$Y = b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + E_3$$

where the meanings of the x's are the same but the weights are changed slightly by the omission of x_7.

Let us now consider whether there are differences between the different sized schools on our chosen criterion. What we are assuming is that there will be no significant loss in the ability to predict if we neglect this information. If when we neglect this information we find a significant loss, we are left to conclude that there are differences, whatever their source. Our restrictions will be

$$b_1 = b_3 = b_5 = c_1$$
$$b_2 = b_4 = b_6 = c_2$$

APPENDIX F—Continued

which result in the restricted model

$$Y = c_1 (x_1 + x_3 + x_5) + c_2 (x_2 + x_4 + x_6) + E_4$$

$$Y = c_1 z_1 + c_2 z_2 + E_4$$

where c_1 and c_2 are regression weights and

z_1 = 1 if the criterion measure is from a student in an urban school; 0 otherwise

z = 1 if the criterion measure is from a student in a rural school; 0 otherwise.

The comparison of E_4 and E_3 using an F-test will decide our question regarding differences between sizes of school.

To make our tests, we need to put a total of nine different categorical vectors into our regression program "ITEREG" for use in our three different models. The program "GENVEC" would be used to take the two items from the input tape, record item 2 as it is, and use item 3 to generate the seven mutually exclusive categories. The two additional categories would be formed by combining categories 1, 3, and 5 into a single category and categories 2, 4, and 6 into a single category. These operations can be accomplished by adding simple statements to the program "GENVEC."

The result might look something like this:

	VARIABLES								
	1	2	3	4	5	6	7	8	9	Y
SAMPLES	1	0	0	0	0	0	0	1	0	1
	1	0	0	0	0	0	0	1	0	3
	0	1	0	0	0	0	0	0	1	7
	0	1	0	0	0	0	0	0	1	8
	0	0	1	0	0	0	0	1	0	2
	0	0	0	1	0	0	0	0	1	4
	0	0	0	0	1	0	0	1	0	2
	0	0	0	0	1	0	0	1	0	1
	0	0	0	0	0	1	0	0	1	1
	0	0	0	0	0	0	1	0	0	3
	0	0	0	0	0	1	0	0	1	1
	0	0	0	0	1	0	0	1	0	2
	0	0	0	0	0	1	0	0	1	1

The first question is decided by using one through seven to predict nine and then using one through six to predict nine. No significant loss occurred, we assumed. The second question was decided by using one through six to predict nine and eight through nine to predict nine. Nothing was said about the outcome of our test, but this is unnecessary for we are only illustrating the technique. Such comparisons of regression models were the foundation for the analyses done in this study. These models appear in subsequent appendixes.

APPENDIX G

REGRESSION MODELS FOR COMPARISONS USING A PUBLIC-PRIVATE SCHOOL, MALE-FEMALE, COLLEGE-NON-COLLEGE CATEGORIZATION

The full model for the general questions posed was

$$Y_i = a_1x_1 + a_2x_2 + a_3x_3\ a_4x_4 + a_5x_5 + a_6x_6 + a_7x_7 + a_8x_8 + E_1$$

where

x_1 = 1 if criterion measure was from a boy in a public school going to college; 0 otherwise
x_2 = 1 if criterion measure was from a boy in a public school not going to college; 0 otherwise
x_3 = 1 if criterion measure was from a boy in a private school going to a college; 0 otherwise
x_4 = 1 if criterion measure was from a boy in a private school not going to college; 0 otherwise
x_5 = 1 if criterion measure was from a girl in a public school going to college; 0 otherwise
x_6 = 1 if criterion measure was from a girl in a public school not going to college; 0 otherwise
x_7 = 1 if criterion measure was from a girl in a private school going to college; 0 otherwise
x_8 = 1 if criterion measure was from a girl in a private school not going to college; 0 otherwise

Y_i was the criterion variable where i goes from one through 17 according to the following list:

1. What the seniors wanted to be.
2. Total number of seniors in graduating class.
3. Total number of seniors going to college.
4. Percent of seniors going to college.
5. Type of program pursued.
6. Age of senior surveyed.
7. Occupational level of father.
8. Occupational level of mother.
9. Educational level of father.
10. Educational level of mother.
11. Scholastic Aptitude Test—verbal.
12. Scholastic Aptitude Test—quantitative.
13. Scholastic Aptitude Test—total.
14. Percentile rank of senior in high school.
15. Time when decision was made.
16. Number of colleges applied to.
17. Choice of college senior will probably attend.

The first question considered was whether there were differences associated with the type of school. The full model was

$$Y_i = a_1x_1 + a_2x_2 + a_3x_3 + a_4x_4 + a_5x_5 + a_6x_6 + a_7x_7 + a_8x_8 + E_1$$

The restrictions imposed were

$$a_1 = a_3 = c_1$$
$$a_2 = a_4 = c_2$$
$$a_5 = a_7 = c_3$$
$$a_6 = a_8 = c_4$$

The first restricted model then became

$$Y_i = c_1\,(x_1 + x_3) + c_2\,(x_2 + x_4) + c_3\,(x_5 + x_7) + c_4\,(x_6 + x_8) + E_2$$

or

1. $Y_i = c_1\,w_1 = c_2w_2 = c_3w_3 + c_4w_4 + E_2$

where

w_1 = 1 if criterion was from a boy going to college; 0 otherwise
w_2 = 1 if criterion was from a boy not going to college; 0 otherwise
w_3 = 1 if criterion was from a girl going to college; 0 otherwise
w_4 = 1 if criterion was from a girl not going to college; 0 otherwise

Y_i was the criterion where i goes from one through 17 with a separate run on the computer for each criterion measure.

The second question posed was whether there were differences associated with sex. The full model remained unchanged, and the following restrictions were imposed on it:

$$a_1 = a_5 = d_1$$
$$a_2 = a_6 = d_2$$
$$a_3 = a_7 = d_3$$
$$a_4 = a_8 = d_4$$

The second restricted model became

$$Y_i = d_1\,(x_1 + x_5) + d_2\,(x_2 + x_6) + d_3\,(x_3 + x_7) + d_4\,(x_4 + x_8) + E_3$$

or

2. $Y_i = d_1v_1 + d_2v_2 + d_3v_3 + d_4v_4 + E_3$

where

v_1 = 1 if criterion was from a senior in a public school going to college; 0 otherwise
v_2 = 1 if criterion was from a senior in a public school not going to college; 0 otherwise
v_3 = 1 if criterion was from a senior in a private school going to college; 0 otherwise
v_4 = 1 if criterion was from a senior in a private school not going to college; 0 otherwise.

The third question posed was whether there were differences associated with college or non-college status. The full model again remained unchanged, and the following restrictions were imposed:

$$a_1 = a_2 = c_1$$
$$a_3 = a_4 = c_2$$
$$a_5 = a_6 = c_3$$
$$a_7 = a_8 = c_4$$

APPENDIX G—Continued

The third restricted model became

$$Y_i = e_1z_1 + e_2z_2 + e_3z_3 + e_4z_4 + E_4$$

where

z_1 = 1 if criterion was from a boy in a public school; 0 otherwise

z_2 = 1 if criterion was from a boy in a private school; 0 otherwise

z_3 = 1 if criterion was from a girl in a public school; 0 otherwise

z_4 = 1 if criterion was from a girl in a private school; 0 otherwise

Twenty model vectors were needed, eight for the eight categories and four each for the three restricted models, and 17 criterion vectors were needed from "GENVEC." The full model used one through eight to predict 21 through 37 and the successive restricted models nine through 12, 13 through 16, and 17 through 20 to predict 21 through 37 where

$9 = 1 + 3$
$10 = 2 + 4$
$11 = 5 + 7$
$12 = 6 + 8$
$13 = 1 + 5$
$14 = 2 + 6$
$15 = 3 + 7$
$16 = 4 + 8$
$17 = 1 + 2$
$18 = 3 + 4$
$19 = 5 + 6$
$20 = 7 + 8$

The degrees of freedom were $8 - 4 = 4$ for the numerator and $n - 8$ for the denominator.

APPENDIX H

REGRESSION MODELS FOR COMPARISON USING THE EXTENT TO WHICH SENIORS WERE HELPED IN PLANNING FOR THEIR FUTURES

The full model for the general question posed was

$$Y_i = a_1x_1 + a_2x_2 + \ldots a_{28}x_{28} + E_1$$

where

x_1 = 1 if parent or other relative influenced very much; 0 otherwise

x_2 = 1 if parent or other relative influenced some; 0 otherwise

x_3 = 1 if parent or other relative influenced very little or none; 0 otherwise

x_4 = 1 if student did not respond; 0 otherwise

x_5 = 1 if high school teacher influenced very much; 0 otherwise

x_6 = 1 if high school teacher influenced some; 0 otherwise

x_7 = 1 if high school teacher influenced very little or none; 0 otherwise

x_8 = 1 if student did not respond; 0 otherwise

x_9 = 1 if high school counselor influenced very much; 0 otherwise

x_{10} = 1 if high school counselor influenced some; 0 otherwise

x_{11} = 1 if high school counselor influenced very little or none; 0 otherwise

x_{12} = 1 if student did not respond; 0 otherwise

x_{13} = 1 if high school principal influenced very much; 0 otherwise

x_{14} = 1 if high school principal influenced some; 0 otherwise

x_{15} = 1 if high school principal influenced very little or none; 0 otherwise

x_{16} = 1 if student did not respond; 0 otherwise

x_{17} = 1 if students on college campus influenced very much; 0 otherwise

x_{18} = 1 if students on college campus influenced some; 0 otherwise

x_{19} = 1 if students on college campus influenced very little or none; 0 otherwise

x_{20} = 1 if student did not respond; 0 otherwise

x_{21} = 1 if classmates or friends influenced very much; 0 otherwise

x_{22} = 1 if classmates or friends influenced some; 0 otherwise

x_{23} = 1 if classmates or friends influenced very little or none; 0 otherwise

x_{24} = 1 if student did not respond; 0 otherwise

x_{25} = 1 if other adults influenced very much; 0 otherwise

x_{26} = 1 if other adults influenced some; 0 otherwise

x_{27} = 1 if other adults influenced very little or none; 0 otherwise

x_{28} = 1 if student did not respond; 0 otherwise.

Y_i was the criterion variable where i goes from one to 10 according to the following list:

1. Aspirations (four-year college, etc.).
2. What the seniors wanted to be.

APPENDIX H—Continued

3. Type of school division (rural or urban, small, medium, or large).
4. Sex of senior.
5. Occupational level of father.
6. Occupational level of mother.
7. Educational level of father.
8. Educational level of mother.
9. School and College Ability test—total.
10. Reasons for not going to college.

The question considered was whether there were differences that were associated with who influenced the senior's decision and the extent to which it was influenced on the criterion measures relating to the senior's future plans—items 1 and 2. Additional criterion measures were included in order to attempt to find clues as to whether or not there were other measures clustered in the 28 categories.

Before the major question was considered, the effect of the no-response categories was examined. The following restrictions were imposed on the full model:

$$a_4 = a_8 = a_{12} = a_{16} = a_{20} = a_{24} = a_{28} = 0$$

The resulting restricted model was:

1. $Y_i = a_1x_1 + a_2x_2 + a_3x_3 + a_4x_4 + a_5x_5 + a_6x_6 + a_7x_7 + a_9x_9 + a_{10}x_{10} + a_{11}x_{11} + a_{13}x_{13} + a_{14}x_{14} + a_{15}x_{15} + a_{17}x_{17} + a_{18}x_{18} + a_{19}x_{19} + a_{21}x_{21} + a_{22}x_{22} + a_{23}x_{23} + a_{25}x_{25} + a_{26}x_{26} + a_{27}x_{27} + E_2$

The restrictions placed upon the full model to answer the question of who influenced and the extent of this influence on the senior's decision were

$$a_1 = a_2 = \ldots = a_{21} = c_1$$

The resulting restricted model, it is obvious, involves only the unit vector since all the categories are collapsed into one. The model was

2. $Y_i = c_1u + E_3$

In both restricted models i goes from one to ten according to the list given with the full model.

The 39 vectors involved here were built with "GENVEC," and a condition was incorporated to run records of public school seniors and private school seniors separately. The degrees of freedom were 7 − 3 = 4 and n − 7 for the first set of restrictions and 7 − 1 = 6 and n − 7 for the second set of restrictions.

APPENDIX I

REGRESSION MODELS FOR STUDY OF THE RELATION OF APPLICATION STATUS TO CHOICE LEVEL OF COLLEGES AND OF CHOICE LEVEL TO OTHER VARIABLES

The full model for the two questions posed was

$$Y = a_1x_1 + a_2x_2 + \ldots + a_9x_9 + E_1$$

where

x_1 = 1 if application to first-choice institution was accepted; 0 otherwise

x_2 = 1 if application to first-choice institution was rejected; 0 otherwise

x_3 = 1 if application status to first-choice institution was standby or unknown; 0 otherwise

x_4 = 1 if application to second-choice institution was accepted; 0 otherwise

x_5 = 1 if application to second-choice institution was rejected; 0 otherwise

x_6 = 1 if application status to second-choice institution was standby or unknown; 0 otherwise

x_7 = 1 if application to third-choice institution was accepted; 0 otherwise

x_8 = 1 if application to third-choice institution was rejected; 0 otherwise

x_9 = 1 if application status to third-choice institution was standby or unknown; 0 otherwise.

Y = choice level of college

The first question considered was whether there were differences that were associated with the status of the applications. The full model is

$$Y = a_1x_1 + a_2x_2 + a_3x_3 + a_4x_4 + a_5x_5 + a_6x_6 + a_7x_7 + a_8x_8 + a_9x_9 + E_1$$

The restrictions to be imposed were

$$a_1 = a_2 = a_3 = c_1$$
$$a_4 = a_5 = a_6 = c_2$$
$$a_7 = a_8 = a_9 = c_3$$

The first restricted model then became

1. $Y = c_1z_1 + c_2z_2 + c_3z_3 + E_2$

where

$z_1 = (x_1 + x_2 + x_3)$ = 1 if application was to first-choice institution; 0 otherwise

$z_2 = (x_4 + x_5 + x_6)$ = 1 if application was to second-choice institution; 0 otherwise

$z_3 = (x_7 + x_8 + x_9)$ = 1 if application was to third-choice institution; 0 otherwise

APPENDIX I—Continued

The second question considered was whether there were differences that were associated with the choice of institution to which application was made. The restrictions to be placed upon the full model in this case were

$$a_1 = a_4 = a_2 = d_1$$
$$a_2 = a_5 = a_8 = d_2$$
$$a_3 = a_6 = a_9 = d_3$$

The second restricted model then became

2. $Y = d_1w_1 + d_2w_2 + d_3w_3 + E_3$

where

$w_1 = (x_1 + {}_4 + x_7) = 1$ if the application was accepted; 0 otherwise
$w_2 = (x_2 + x_5 + x_8) = 1$ if the application was rejected; 0 otherwise
$w_3 = (x_3 + x_6 + x_9) = 1$ if the application status was standby or unknown; 0 otherwise

There were 16 vectors produced by "GENVEC," and the full model used one through nine to predict 16, the first restricted model used ten through 12 to predict 16, the second restricted model used 13 through 15 to predict 16. The degrees of freedom were nine minus three equals six and n minus nine for both models.

Choice Level and Other Variables. Having an idea how choice level of college and application status were related, it would be instructive to ask how choice level of college was related to other variables which might influence it. The following regression model was written to examine some of those variables.

$$Y = a_1x_1 + a_2x_2 + \dots + a_{11}x_{11} + E_1$$

where

x_1 = Educational level of father
x_2 = Educational level of mother
x_3 = School and College Ability test score—verbal
x_4 = School and College Ability test score—quantitative
x_5 = Rank of senior in high school class
x_6 = Number of colleges applied to
x_7 = Status of first-choice application
x_8 = Status of second-choice application
x_9 = Status of third-choice application
x_{10} = Scholastic Aptitude test score—verbal
x_{11} = Scholastic Aptitude test score—math
Y = choice level of college (coded one through five)

APPENDIX J

SURVEY OF SELECTED ARTICLES RELATED TO SENIOR SURVEY QUESTIONS

A survey of literature was conducted prior to beginning the second phase of the analysis of the Senior Survey data. The intent of this and the following section is to give a sample of readings found in this survey, and not to give a comprehensive review of literature related to each of the questions on the survey form.

The 1966 *Bulletin of the National Association of Secondary School Principals*[1] contains four articles relating to rank in class. The authors discuss college attitudes and practices, attitudes of secondary schools, recommendations for determining rank-in-class, realistic ranking, and an investigation of a grade-weighting system. Most existing studies use rank-in-class as it relates to college attendance. These four articles furnished some direction in the use of rank-in-class as a variable, but there were no examples of its use in a statistical manner.

A 1966 issue of the *Virginia Journal of Education*[2] contains a report on the 1964-65 Virginia high school graduates who entered college in the fall of 1965 Data were presented largely in percentages in terms of: (1) percentage of high school graduates attending college by county, city, and State, under headings of White, Negro, and Combined; (2) percentage of total high school graduates furthering their education—this table picked up those students who attended trade school, business school, or entered nurses training; (3) percentage of college attendance by counties representing highest and lowest attendance; and (4) percentage of college attendance in terms of size of high school. Data were presented for both counties and cities.

Astin[3] reported a study designed to assess the career expectations of 650 male high school seniors based on their personal characteristics when they were in the ninth grade and of selected environmental characteristics of the school attended. She found that the student's measured interests and expressed career choice at the ninth-grade level were the best predictors of career outcomes at the twelfth-grade level.

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[1] Rank in Class: A Review of the Issues and a New Statement, *Bulletin of the National Association of Secondary School Principals*, 50: 76-98, November, 1966.

[2] 1964-65 High School Graduates in Continuation Programs, *Virginia Journal of Education*, 59: 32, April, 1966.

[3] Astin, Helen S., "Career Development During the High School Years," *Journal of Counseling Psychology*, 14: 94-8, March, 1967.

The specific goals of the study were:

1. To identify the personal characteristics of the student at the ninth-grade level that predict his expressed vocational choice four years later at the twelfth-grade level.
2. To identify the characteristics of the student's secondary school that affect his expressed career choice at the time of graduation.
3. To identify some of the unique qualities associated with the choice of particular kinds of occupations.

The group classification of occupations were: (1) Sciences, (2) Engineering, (3) Education—Teaching, (4) Professions—Arts and Humanities, (5) Other—No college degrees required, (6) Business and Management, and (7) Unclassified.

Twenty-six (26) predictor variables were derived from measures of students' personal characteristics taken in the ninth grade. Additionally, three measures of high school environmental characteristics were used in the analysis. These were: (1) School size, (2) High school mean on R-250 (Reading Comprehension), and (3) Percentage of graduating seniors who go to college. Two separate analyses were made, one using only the 26 measures plus the additional three measures concerning the high school environment.

The statistical method employed was multiple discriminant analysis. The major findings included differing rank orders of the grouped occupation classications in terms of five discriminant functions. In general, it was found that each twelfth-grade choice was best predicted from similar choices and interest expressed three years earlier.

Elton[4] investigated the influence of personality and aptitude predictors on the career role choices and vocational choices of entering male college freshmen. Two separate multiple-discriminant analyses revealed: (a) personality factors accounted for the major part of discrimination in vocational choice and (b) a conjoint dimension of ability and personality accounted for the major part of discrimination in career role choices.

The general purpose of the study was to investigate the influence of personality and ability predictors in the selection of career roles and vocational choices. Specifically, it was hypothesized that personality factors played a more important part in vocational choices, whereas career role choices were influenced more by ability. However, it was found with few exceptions, that there is very little differentiation between vocational choice and career role among freshmen. Two assumptions relative to the findings were made.

1. Freshmen are at the stage of development in which the choice of vocation is a realistic concern in their struggle for adult status; the choice of career role within a vocation is still too far in the future to be very meaningful.
2. Freshmen are naive regarding the variety of career roles within a vocation.

A study by Madaus and O'Hara[5] demonstrated that career choice had crystallized during high school. Differences existed in the multivariate vocational interest patterns, as measured by the Kuder Preference Record —Vocational, Form CH, among high school boys classified according to nine broad categories of occupational choice selected while in high school. Specifically, then, the study attempted to determine the nature and extent of discrimination possible between groups of boys indicating a preference for nine different occupational groups.

Some of the findings of the study were:

1. It appeared that for college preparatory boys, crystallization of vocational preference is more specific than one of merely science—nonscience.
2. It appeared that interests, as measured by the Kuder, deserve a more prominent place in any hierarchy of systems of data than do the personality, value, or aptitude dimensions.
3. These data also indicated that once boys are classified by occupational field they have the same vocational interest patterns regardless of their year in high school.

Watley[6] attempted to determine the extent to which counselors known to differ in their ability to predict educational criteria (grades and student persistence in their educational programs) would disagree in their judgments of occupational suitability for the same cases. The suitability of seven occupations was judged by each counselor for a total of 50 cases and systematic differences were found among the occupational suitability judgments of counselors who previously predicted at high, moderate, and low levels of accuracy.

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[4] Elton, Charles F., "Male Career Role and Vocational Choice; Their Prediction with Personality and Aptitude Variables," *Journal of Counseling Psychology*, 14: 99-105, March, 1967.

[5] Madaus, G. F., and R. P. O'Hara, "Vocational Interest Patterns of High School Boys: A Multivariate Approach," *Journal of Counseling Psychology*, 14: 106-12, March, 1967.

[6] Watley, Donwan J., "Counselor Predictive Skill and Differential Judgments of Occupational Suitability," *Journal of Counseling Psychology*, 14: 309-13, July, 1967.

APPENDIX J—Continued

The sample consisted of 36 counselors, all of whom had taken part in a similar investigation earlier. The predictions were made for 50 first-quarter freshmen at the University of Minnesota in terms of suitability of the following occupations for each student: (1) medical doctor, (2) electrical engineer, (3) social case worker, (4) forester, (5) accountant, (6) sales manager, and (7) lawyer. The basic statistic employed was the Chi-Square for comparison between expected and observed frequencies.

Basically, the findings of the study indicated that counselors did not always agree about what they considered occupationally suitable for the same person. Therefore, the same student could easily have received quite a different set of interpretive data depending on which counselor he happened to see.

Sanborn[7] reported a study dealing with a population of students whose average mental test scores placed them in the highest five percent of students in the age range. For the study, a group of 60 students who had completed the first semester of college were randomly selected, 30 with college grade-point averages lower than 2.00, and 30 with college grade-point averages about 2.00. Many of the comparisons were done in retrospect by obtaining information from high school records.

The major results of the study are listed as being:

1. Differences between overall scholastic performances of the two groups appeared to become more marked as they progressed through high school into college.
2. There were significant relationships between the factors students considered when choosing colleges and their first semester grade-point average.
3. There was a significant relationship between college success and the selection of a major field of study during the freshman year or before.
4. There was a relationship between scholastic success and degree of specificity of vocational goals.
5. Degree of specificity of ten-year goals was related to success in college.
6. There was a trend indicating that students who had vocational goals tended to take academic factors into account more often when choosing a college than did students who were undecided about career goals.

Hanson[8] completed an unsophisticated study in which 142 ninth-grade girls completed a vocational questionnaire which asked them to list their father's occupation, their mother's occupation, their preferred occupation, their father's suggested vocation for them, and their mother's suggested vocation for them. The occupations were rated according to the Roe Occupational Classification Scale.[9] The numeric quantities representing the means of the five selected occupations were statistically compared using a t-test with the following results:

1. Pupil's preferences were significantly higher than their father's occupation.
2. Pupil's preferences were significantly higher than their mother's vocation.
3. The fathers' suggested vocations for their daughters were significantly higher than their own vocations.
4. The mothers' suggested vocations for their daughters were significantly higher than their own vocations.
5. There was no significant differences between fathers' and mothers' vocations when both were employed.
6. Fathers' and mothers' suggestions were not significantly different from daughters' preferences.

Banducci[10] reported on 3,104 high school seniors by examining school achievement, educational aspirations, and expectations of seniors of working and nonworking mothers. The sample was stratified by socio-economic level and by the sex of the student. The fact that mothers were employed full time appeared to have little, if any, detrimental effect on children in regard to educational aspirations, expectations, and achievement. There was even a trend for these children to have higher educational aspirations and expectations than children of nonworking mothers, with the exception of boys from the professional, socio-economic level. Aspirations and expectations were less divergent at higher socio-economic levels than at lower levels.

The basic statistic employed in the study was Chi-Square and the socio-economic levels were (1) Laborer,

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[7] Sanborn, Marshall P., "Vocational Choice, College Choice, and Scholastic Success of Superior Students," *Vocational Guidance Quarterly*, 13: 161-8, Spring, 1965.

[8] Hanson, Jerrald T., "Ninth-Grade Girls' Vocational Choices and Their Parents' Occupational Level," *The Vocational Guidance Quarterly*, 13: 261-64, Summer, 1965.

[9] Roe, Ann, *The Psychology of Occupations*, New York: Wiley, 1959, 149-247.

[10] Banducci, Ramon, "The Effect of Mother's Employment on the Achievement, Aspirations, and Expectations of the Child," *The Personnel and Guidance Journal*, 46: 263-67, November, 1967.

(2) Skilled Worker, and (3) Professional. As indicated above, separate comparisons were made for boys and girls.

Kinnane and Bannon[11] studied the influence of perceived dominance of one parent over the other in terms of work-value orientations of college women.

Basically the results were as follows:

1. Perceived parental influence was highly related to the socio-economic status of the family (as indicated by the occupational level of the father), and only in this relationship was it significant.
2. Fathers who engaged in professional work and whose level of education and training was superior to that of the mother exerted a greater influence on the female child, but she does not appear to introject the father's work-value orientation; rather, it was the father's idealized goals for the daughter which were internalized.
3. The girl who identified with the mother more often came from a home where the father worked at the skilled or unskilled level, and where work was a more realistic possibility for the women, and orientations were therefore stronger on all work-value.

A study by Hammond[12] illustrates an approach relative to decision-making concerning college choices. Factors were listed that affected the decision (similar to Question 15 on the Senior Survey form) and weights were assigned to each according to their relative importance as seen by the students. A number of sub-decisions were then made by rating each of the possible colleges with respect to each of the factors. The results of these sub-decisions were combined to arrive at a major decision, the choice of the best college for each individual student. For example, if location was rated as the number ten factor and assigned a weight of seven, then this one sub-decision would have a total score of 70. In the comparison of which college (5) to attend, the sub-decisions concerning each would be totaled to indicate the best choice for each student.

The research described in a paper by Stevic and Uhlig[13] was intended to provide insight into the self-concept of Appalachian students concerning their probable life work. Students in a high school located in southeastern Kentucky were compared with students from Ohio who were representative of persons who had spent their lives in the Appalachian community and who had migrated into the area from Appalachia during the previous three years.

The Occupational Aspiration Scale (OAS) was administered to three groups (Kentucky Appalachia, Ohio Migrants, and Ohio Natives) to detect differences in aspirational levels. Other data were collected to reflect occupational choices, preferred role models, and perceptions of characteristics required for success.

The findings of the study indicate:

1. Appalachian youth who stayed in the geographic area had a significantly lower aspirational level than did students who were native to an urban (midway between rural and urban) area.
2. The Appalachian youth had different personal role models and characteristics for success than those students who had migrated from the Appalachian area.
3. One of the major problems in raising the occupational aspirations of Appalachian students appeared to be lack of information and opportunity rather than lack of ability.

Panos, Astin, and Creager[14] surveyed a total of 280,650 entering freshmen students at 359 colleges and universities in 1967. The purpose of the report was to present both national normative data on the characteristics of students who entered college as first-time, full-time freshmen in 1967 and comparative data on the characteristics of students who entered different types of institutions.

Stratification in the sample design was as follows:

TWO-YEAR COLLEGES		FOUR-YEAR COLLEGES AND UNIVERSITIES
Public	*Private*	Levels of "Affluence"—per student expenditures for educational and general purposes
Enrollment Less Than 500	Enrollment Less Than 1000	*Unknown*
500- 999	1000 or more	Less than $750
1000-2499		$ 750- 999
2500 or more		$1000-1249
		$1250-1499
		$1500-1749
		$1750-1999
		$2000-2249
		$2250-2499
		$2500 or more

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[11] Kinnane, John F. and Sr. M. Margaret Bannon, "Perceived Parental Influence and Work-Value Orientation," *The Personnel and Guidance Journal*, 43: 273-79, November, 1964.

[12] Hammond, John S., "Bringing Order Into the Selection of A College," *The Personnel and Guidance Journal*, 43: 654-660.

[13] Stevic, Richard and George Uhlig, "Occupational Aspirations of Selected Appalachian Youth," *The Personnel and Guidance Journal*, 45: 435-439, June, 1967.

[14] Panos, Robert J., Alexander W. Astin, and John A. Creager, *National Norms For Entering College Freshmen*—Fall, 1967, American Council on Education, Washington: Vol. 2, No. 7, 1967.

APPENDIX J—Continued

Perrone[15] completed a study of factors influencing high school seniors' occupational preference. A sample of 192 senior boys and 236 senior girls was arbitrarily selected from schools in both rural and urban areas. Approximately half of the boys and girls continued to study after graduation while the other half entered some occupation. Evaluation instruments included the Large-Thorndike Verbal and Nonverbal Intelligence Tests, The California F-scale, a Personality Scale for Dominance, a paper and pencil test of creativity, and an occupational preference questionnaire. The occupations selected by the students as being most like the one they would like to enter were grouped into families for statistical comparison (F-test and t-test) and the scores were obtained from the various tests. The areas covered by test scores were identified as an F-scale, Goal Orientation, Creativity, Verbal I.Q., and and Nonverbal I.Q. None of the occupational preference groups (Service, Business Contact, Organization, Technology, Outdoor Science, General Cultural, and Arts and Entertainment) could be distinguished among the five dimensions that were studied. Boys with similar scores on cognitive measures (Verbal and Nonverbal I.Q.) tended to indicate a preference for similar occupational groups. On one cognitive measure, Verbal I.Q., girls with the highest scores indicated a preference for General Cultural Occupations (many specified teaching), while girls who scored low preferred organization occupations (majority specified secretarial).

A study by Little[16] was initiated as one of a series of studies in the State of Wisconsin to discover facts and information needed for the planning of state-wide programs of higher education in Wisconsin. A study of both high school level and college level students was included. Some of the questions to which answers were sought were as follows:

1. Who goes to college—who does not?
2. What circumstances or conditions influence the decisions of youth to continue or not to continue their schooling beyond high school?
3. Do the plans of high school graduates about college materialize?
4. To what extent are youth of high potential achievement identified by such measures as rank in class and intelligence test scores?
5. Do high ability youth who do not plan to go to school change their plans later? If not, what types of work do they enter?
6. To what extent do the most able college freshmen fail to complete their studies?
7. To what extent do the most able college graduates continue to advanced studies?
8. What are the important differences, if any, between highly able university students who complete degrees and those who do not?

The report was primarily to give percentages of different aspects of the study, with some minor explorations into inter-relationships of some of the data. There were plans for continuing and follow-up studies which, if conducted, would be contained in later reports.

The survey of high school seniors was very similar to the one conducted in Virginia. A total of 34,151 (nearly 95 percent) seniors completed the survey instruments. From the total number of responding seniors, a working sample of 5,675 questionnaires were randomly selected.

Parents of the "working sample" were surveyed the following fall to (1) learn whether the plans announced by the graduates in the Spring had been followed or changed; and (2) discover the desires and attitudes of parents about the education of their sons or daughters beyond high school, and about the value of college education in general. There was a 48.9 percent response from the parents.

Later, follow-up questionnaires were sent to the scholastically-talented youths who in the initial survey indicated that they were not planning to go to college. This later questionnaire asked for a report of their current activity, their satisfaction with their status, their plans, if any, for further training or education, and a new expression of their attitude toward the value of further education.

The presentation concerning the plans of the high school graduates were reported as two basic groups: those planning to attend college and those not planning to attend college. The method of presentation employed was frequency distributions and percentages in terms of the various information obtained from the questionnaire, i.e., kinds of schools the graduates planned to attend, mental ability of the graduates, scholastic achievements, occupations of fathers, etc.

The remaining presentations of survey data followed the same procedure of frequency distribution and percentage reporting. This included the survey of the parents, the plans of graduates with high scholastic promise, the survey of promising youths who did not attend college, and the persistence of high ability students in a state university.

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[15] Perrone, P. A., "Factors Influencing High School Seniors' Occupational Preference," *Personnel and Guidance Journal,* 42: 976-80, June, 1964.

[16] Little, J. Kenneth, *Explorations Into the College Plans and Experiences of High School Graduates: A Statewide Inquiry.* Washington, Cooperative Research Project No. 0485, Office of Education, U. S. Department of Health, Education and Welfare, September, 1959.

Finally, a section entitled "Summary and Conclusions" summarized the plans of the graduates, the characteristics of continuing and non-continuing graduates, the survey of parents, the plans of graduates with high scholastic promise, promising youths who did not attend college, the plans of the college graduates, and the persistence of high ability students in a university.

APPENDIX K

PRELIMINARY 1970 SENIOR SURVEY FORM

The experience with the 1967 Senior Survey was for the most part a very fruitful one. Several problems were encountered, however, and some of these could be traced directly to the form used for collecting the survey data. Consequently, several revisions in the form have been made. The proposed 1970 Senior Survey form will be field tested with a sample group of 1969 seniors to determine if the revisions which were made will adequately answer the questions raised with the 1967 form.

The revisions fall into one of three broad classes which, while they are not entirely exclusive, are used in order to conveniently classify the revisions. These classifications will also indicate to others who construct survey forms some pitfalls that might be avoided. The three classes into which the revisions fall are: (1) additions, (2) deletions, and (3) clarification of instructions.

Additions

Precoded form numbers and school numbers have been added to facilitate handling and processing. Student coding of his name has been included to improve identification and spelling accuracy. Questions four and five were added to obtain information on students taking College Entrance Examination Board Advanced Placement examinations. Advanced Placement identification numbers have been requested in order that follow-up studies may be conducted.

In order that more meaningful and complete data might be obtained and to facilitate categorical classification for analysis, Question six was added and Question seven and eight modified to secure data only on "head of household" rather than "mothers" and "fathers." Question 11 and 14 were also added in order to obtain further information about sources of help in deciding on post-high-school plans.

Deletions

The deletions from the 1967 survey form fall into two classes. The first of these classes is undesirable or unnecessary responses to questions. The second is unnecessary items or questions. Unnecessary or undesirable responses include those responses which offer a convenient response for the senior and those responses which contribute no important or useful information for analysis. Unnecessary items are those items which did not provide any useful information for the analysis.

Undesirable or Unwanted Responses

Since "other" and "I do not know" often offered a convenient response while providing little useful information, it is felt that these responses should be deleted from the survey form except in cases where the response might elicit useful information. It might be useful to know that a senior does not know what he wants to be, but it is of very little value to know that his most likely reason for not going to college is that he does not know his most likely reason.

Unnecessary Items

Almost all students responding to the 1967 survey indicated that there was a college within commuting distance. Therefore, additional information would be necessary to make this fact meaningful, e.g. did the college offer the course which the student wanted to pursue, and could the student gain admission to this college? Since space on the survey form is limited, rather than add these questions it was decided to omit the question regarding commuting distance to colleges in its entirety.

Clarification of Instructions

One of the most troublesome problems, and one which recurred in almost every attempt to analyze the data, was the problem of clearly placing the senior's record into one of the categories desired in analysis procedures. The selection of records was done by computer and was based on coded responses as selection criteria. It was necessary, then, that these codes be accurate indicators of the category in which the record was to be placed.

Because of the difficulty experienced with the categorization of records from the 1967 survey, it was decided that special attention should be given to constructing the form for the 1970 survey so that the desired categories are distinct and not overlapping and so that the instructions are clear as to which senior should answer what questions. (See Questions 15 through 24.) This method of giving instructions directs the respondent through the questions and, if properly administered, elicits from him all the desired information. At the same time it prevents him from answering questions which are on the form and which are not applicable to him.

There were essentially three kinds of data obtained from the seniors in the 1967 survey: (1) personal information, (2) academic information, and (3) general information about the senior's plans and his actions in executing these plans. Personal information included such items as age and sex; academic information included such data as SAT scores and SCAT scores; and general information included such items as what the senior wanted to do and when he decided what he wanted to do.

The questions asking for information which fell into these three categories were nonsystematically placed on the 1967 survey form. For convenience in studying the responses to questions of one type, and in order to easily guide the respondent through the appropriate questions, the 1970 survey form is designed so that items concerned with the same kind of information appear together on the form. The separation of items is not pointed out, but separation on the form is physical and clear to the person recording the responses. The order on the form is: first, personal data and academic data (Questions A-F, and questions 1-5); then, general information (Questions 6-8); and, finally, occupational and educational plans (Questions 8-24).

Coded Variables Using Codes Which Correspond to Rank

In the analysis of the data from the 1967 survey, coded variables were used for the purpose of generating categories of seniors for data analysis, using the computer in the generation of categories. The codes for these variables were selected so that they would, in as many cases as possible, have some meaning when interpreted as ranks. Thus, correlation coefficients calculated in multiple regression programs used in the analysis for phase two of the study could be used as guides to possible important relationships among the variables, coded as well as continuous. This kind of coding is planned for use with the 1970 survey form. Relationships have been anticipated in the codes selected so that positive correlation coefficients will result.

In order to minimize the number of missing and incomplete forms, explicit directions for administration will accompany the survey form. The directions will include instructions about the layout of the form, importance of accuracy and completeness in filling out the form, and instructions about checking all completed forms for accuracy and completeness. It is planned that a teacher or a counselor check each form before any are returned to the Department of Education.

In addition to the instructions for administering the survey form which will accompany the forms, and in conjunction with these instructions, instructions to the respondent will appear on the survey form itself. (See pages one and four of the form.) These instructions are designed to lead the respondent through the form, and they will contain all necessary and relevant information. At present it is planned that the respondent will not have to use any source but the survey form itself for his instructions.

STATE DEPARTMENT OF EDUCATION
RICHMOND, VIRGINIA

Survey of Seniors' Post-High School Plans

You are requested to participate in an important study concerned with the educational and occupational aspirations, plans, and decisions of students at the time of high school graduation.

The information you furnish will be used to prepare grouped data and analyses which would be helpful in the improvement of many kinds of opportunities for students.

This is not a test and cannot affect your grades.

INSTRUCTIONS

Please answer the questions as requested in the instructions.

Answer all questions truthfully and accurately.

Mark your answers carefully in the correct spaces with a soft lead pencil (No. 2 lead preferred). Erase completely if you want to change your answer.

Question 8. Column for "Head of Household." Which job among the list of jobs below is most like the kind of work the head of your household does? If he or she works on more than one job, choose the one in which he or she spends the most time. If the head of your household is retired or is not working, what was his or her occupation? *Look over the entire List of Jobs* (*below*), *then choose and mark one answer.*

Question 8. Column for "I Want To Be." What occupation do you want to go into? *Look over the entire List of Jobs* (*below*), *then choose and mark one answer.*

LIST OF JOBS

Professions A, etc.—such as executive in a large business, government official, accountant (C.P.A.), architect, chemist, engineer (college graduate), lawyer, physician, college teacher

Professions B, etc.—such as district manager, office manager, personnel manager, production manager, proprietor of medium business, accountants (not C.P.A.), engineer (not college graduate), nurse, pharmacist, social worker, elementary or high school teacher

Professions C., etc.—such as insurance agent, manager of department store, private secretary, service manager, shop manager, store manager, small business owner, I.B.M. programmer, laboratory assistant, photographer, surveyor, farm owner ($25,000-$35,000)

Clerical, sales, technician, etc.—such as bank clerk and teller, bookkeeper, post office clerk, sales clerk, shipping clerk, draftsman, laboratory technician, P.B.X. operator, supervisor of maintenance, timekeeper, owner of little business ($3,000-$6,000), farm owner ($10,000-$20,000)

Skilled manual employee—such as auto body repairer, barber, bulldozer operator, butcher, cabinet maker, carpenter, electrician, machinist (trained), mason, mechanic (trained), painter, plumber, city policeman, small farm owner (under $10,000), farm tenant who owns farm equipment

Machine operator, semi-skilled employee—such as assembly line worker, bus driver, short order cook, garage and gas station assistant, guard, doorkeeper, watchman, meat cutter and packer, practical nurse, general truck driver

Unskilled employee—such as cafeteria worker, dairy worker, deck hand, farm helper, freight handler, unspecified laborer, street cleaner, share cropper

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Questions 12 and 13. Choose one source from among the four listed that provided the most information that helped you in deciding on your plans after high school, and mark the appropriate box in column one, under "most." Next, choose one source from the remaining three that was the second most important source of information and mark the appropriate box in column 2. Then decide which source provided the least information and mark the appropriate box in column 4. Mark the remaining source in column 3. Be sure that there is only one mark in each column and in each row. Proceed in a similar manner for Question 13.

Question 15. If your answer to Question 15 was C, answer Question 16 by marking the block having the same number as that listed below next to the curriculum you plan to take. *Disregard* the headings listed on Question 16. After answering Question 16, you have completed the questionnaire.

Curriculum—Mark Number

Accounting	4
Agricultural Business Technology	1
Air Conditioning and Refrigeration	9
Architectural	2
Automotive	18
Business Management	4
Chemical Technology	13
Child Care Technician and Supervision	5
Civil (Engr.) Technology	6
Commercial Art	8
Communication Technology (T.V.)	17
Cosmetology	18
Data Processing	12
Diesel Mechanics	9
Drafting	2
Electrical	9
Electronics	13
Environmental Technology	16
Food Service Management	10
Industrial Technology	6
Instrumentation	9
Machinist	18
Masonry	18
Mechanical (Engr.) Technology	6
Merchandising and Distribution	4
Nursing	11
Police Science	14
Practical Nursing	15
Printing	7
Radio Communications	17
Radiologic Technology	3
Real Estate	4
Secretarial Science	7
Sheet Metal	18
Stenographer-Clerk	7
Teacher Aide	5
Textile Technology	9
Tool Making Technology	9
Welding	18

Question 18. Listed below are the names and types of several colleges along with their code numbers. For each of the colleges to which you have applied (first, second, and third choices), please find the appropriate number code and mark it in the appropriate choice space.

Within Virginia—State Controlled Institutions

Four-Year	Code No.	Four-Year	Code No.
George Mason College	01	Mary Washington College	04
Longwood College	02	Old Dominion College	05
Madison College	03	Radford College	06

1. Print your name in the boxes provided. Then mark the letter box below which matches each letter of your name.

Last Name	First Name	M
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

STUDENTS: Do not mark in blocks A, B, C, D, E, F

A

0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

B

0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

C

0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

D

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

E

0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

F

0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

0	0	0	0	0	0	0
1	1	1	1	1	1	1
2	2	2	2	2	2	2
3	3	3	3	3	3	3
4	4	4	4	4	4	4
5	5	5	5	5	5	5
6	6	6	6	6	6	6
7	7	7	7	7	7	7
8	8	8	8	8	8	8
9	9	9	9	9	9	9

Virginia State Department of Education

Survey of Seniors' Post-High Plans

2. SEX

☐ MALE ☐ FEMALE

3. AGE

17 OR UNDER | 18 | 19 OR OVER

4. Have You Taken any College Entrance Examination Board Advanced Placement Courses?

☐ Yes ☐ No

5. If you answered Yes to Item 4, write and mark your CEEBAP Registration Number in space below.

0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

6. Who is the Head of Your Household?

☐ Father ☐ Step-Father

☐ Mother ☐ Step-Mother

☐ Guardian or Other Person

0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

Side 1

STUDENTS: An Answer of A or B to Item 15 Requires Answering Items 16, 17, 18, 19, 20. An Answer of D to Item 15, Requires Answering Item 21.
An Answer of C to Item 15 ——See Instructions Page 4. An Answer of E to Item 15 Requires Answering, 22, 23, 24.

Side 2

7. How far did the head of your household go in school?

- ☐ Received graduate school degree
- ☐ Graduated from college
- ☐ Completed high school
- ☐ Attended college or other technical or special school
- ☐ Attended high school
- ☐ Completed elementary school (7th grade)
- ☐ Completed less than 7 grades

8. —Occupation—
(See instructions)
MARK ONLY ONE BLOCK IN EACH COLUMN

Head of House-Hold	I Want To Be	
☐	☐	Professions A, etc.
☐	☐	Professions B, etc.
☐	☐	Professions C, etc.
☐	☐	Clerical, sales, technician, etc.
☐	☐	Skilled manual employee
☐	☐	Machine operator; semi-skilled employee
☐	☐	Unskilled employee

9. Which One of the Following High School Programs Have you Taken?

- ☐ College Preparatory
- ☐ Commercial or Business
- ☐ General
- ☐ Vocational

10. When Did You Decide on What You Want to Do after High School? (Mark One)

- ☐ I Have Not Decided Yet
- ☐ Just This Year
- ☐ In the 11th Grade
- ☐ In the 9th or 10th Grade
- ☐ In the 7th or 8th Grade
- ☐ Before the 7th Grade

11. To what extent were sources of help available to you in deciding on your plans after high school? (Mark Only One Block)

- ☐ Very much
- ☐ Enough
- ☐ Some
- ☐ Very Little

12. Rank from most to least the following sources that provided information to help you decide your plans after high school. (Mark Only One Block in Each Column; Mark Only One Block in Each Row)

—(SEE INSTRUCTIONS - Page 1) —

Most			Least	
☐	☐	☐	☐	Parent or Other Relative
☐	☐	☐	☐	High School Teachers
☐	☐	☐	☐	High School Counselor
☐	☐	☐	☐	Classmates or Friends

13. Rank from most to least the following factors that influenced your vocational choice. (Mark Only One Block in Each Column; Mark Only One Block in each Row)

— (SEE INSTRUCTIONS - Page 1)

Most				Least	
☐	☐	☐	☐	☐	Opportunity for personal satisfaction
☐	☐	☐	☐	☐	Opportunity for material gain
☐	☐	☐	☐	☐	Opportunity for service to others
☐	☐	☐	☐	☐	Interest or previous experience
☐	☐	☐	☐	☐	Family influence

14. To what extent did you seek help in deciding on your plans after high school? (Mark Only One Block)

- ☐ Very much
- ☐ Enough
- ☐ Some
- ☐ Very Little

15. Which statement most accurately describes your immediate plans after graduation?

- A ☐ I plan to enroll in a four-year college.
- B ☐ I plan to enroll in a two-year college and transfer to a four-year college
- C ☐ I plan to enroll in a two-year college in a terminal program.
- D ☐ I plan to enroll in some other type of educational program.
- E ☐ I do not plan to enroll in any full-time educational program.

16. Which of the following will most likely be your main field of study in college?

- ☐1 Agriculture
- ☐2 Architecture
- ☐3 Biological Science
- ☐4 Business and/or Commerce
- ☐5 Education
- ☐6 Engineering
- ☐7 English and/or Journalism
- ☐8 Fine or Applied Arts
- ☐9 Foreign Language
- ☐10 Home economics
- ☐11 Nursing
- ☐12 Pharmacy
- ☐13 Physical science
- ☐14 Pre-law
- ☐15 Pre-medical
- ☐16 Psychology
- ☐17 Social science
- ☐18 Trade

17. How Many Colleges Have You Applied to?

☐1 ☐2 ☐3 ☐4 or more

18. List These Colleges in Order of Preference (See Instructions)

1st Choice		2nd Choice		3rd Choice	
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

☐	☐	☐	☐	☐	1
☐	☐	☐	☐	☐	2
☐	☐	☐	☐	☐	3
☐	☐	☐	☐	☐	4
☐	☐	☐	☐	☐	5
☐	☐	☐	☐	☐	6
☐	☐	☐	☐	☐	7
☐	☐	☐	☐	☐	8
☐	☐	☐	☐	☐	9
☐	☐	☐	☐	☐	10

19. What is the Status of These Applications?
(Mark the one in each that applies)

—Choices—

1st	2nd	3rd	
☐	☐	☐	Accepted
☐	☐	☐	Rejected
☐	☐	☐	Standby or Unknown

20. Which One of these Colleges Will You Most Likely Attend?

- ☐ 1st choice
- ☐ 2nd choice
- ☐ 3rd choice
- ☐ A College Other than 1, 2, or 3

21. What type of educational program do you plan to undertake?

- ☐ Business
- ☐ Nursing
- ☐ Technical
- ☐ Trade
- ☐ Apprentice

22. What is the one most likely reason for not continuing your education?

- ☐ I cannot afford it
- ☐ My grades are not good enough
- ☐ The work I want to do does not require more education.
- ☐ I need to earn money now.
- ☐ I an not interested.

23. What will you most likely do after graduation? (Mark One)

- ☐ Work at a full-time job and attend school part-time
- ☐ Work at a full-time job with a training program.
- ☐ Work at a full-time job with no training program.
- ☐ Go into military service
- ☐ Become a housewife with no other employment.

24. What kind of work do you plan to do? (Mark One)

- ☐ Construction work
- ☐ Factory work
- ☐ Office work
- ☐ Sales Work
- ☐ Farm Work
- ☐ Service Work

FOUR-YEAR	CODE No.
University of Virginia	07
Virginia Commonwealth University	08
V. M. I.	09
V. P. I.	10
Virginia State College—Norfolk	11
Virginia State College—Petersburg	12
William and Mary	13

TWO-YEAR	
Blue Ridge Community College	14
Christopher Newport College (W&M)	15
Clinch Valley College (UVA)	16
Dabney S. Lancaster Community College, Clifton Forge	17

TWO-YEAR	CODE No.
Danville Community College	18
Eastern Shore Branch (UVA)	19
Frederick Community College	20
John Tyler Community College	21
New River Vocational Tech. School	22
Northern Va. Community College	23
Patrick Henry College (UVA)	24
Richard Bland College (W&M)	25
Southwest Va. Community College	26
Tech Institute—Old Dominion College	27
Thomas Nelson Community College	28
Virginia Western Community College	29
Wash County Voc.—Tech School	30
Wytheville Community College	31

Within Virginia—Privately Controlled Institutions

FOUR-YEAR	CODE No.
Bridgewater College	32
Eastern Mennonite College	33
Emory and Henry College	34
Hampden-Sydney College	35
Hampton Institute	36
Hollins College	37
Institute of Textile Technology	38
Lynchburg College	39
Mary Baldwin College	40
Pres. School of Christian Ed.	41
Protestant Episcopal Theological Seminary in Virginia	42
Randolph-Macon College, Ashland	43
Randolph-Macon Woman's College, Lynchburg	44
Roanoke College	45
Saint Paul's College	46
Shenandoah Conservatory of Music	47
Stratford College	48
Sweet Briar College	49

FOUR-YEAR	CODE No.
Union Theol. Seminary in Virginia	50
University of Richmond—(Richmond College and University College)	51
Virginia Union University	52
Virginia Wesleyan College	53
Washington and Lee University	54

TWO-YEAR	
Averett College	55
Bluefield College	56
Ferrum Junior College	57
Marymount College of Virginia	58
Southern Seminary Junior College	59
Sullins College	60
Virginia Intermont College	61
Virginia Seminary and College	62

Other	
Business, nursing, trade or tech school in Va.	63

Regional Institutions Outside Virginia

South	*Code No.*
District of Columbia	
George Washington University	64
Howard University	65
Florida	
Florida State	66
Miami University	67
University of Florida	68
Georgia	
Georgia Tech	69
University of Georgia	70
Kentucky	
University of Kentucky	71
Maryland	
University of Maryland	72
U. S. Naval Academy	73
Mississippi	
Mississippi State	74
North Carolina	
Duke University	75
North Carolina State	76
University of North Carolina	77
Wake Forest College	78
North Carolina College at Durham	79
South Carolina	
Clemson University	80
University of South Carolina	81
Tennessee	
University of Tennessee	82
Vanderbilt University	83
East Tennessee State University	84

South	*Code No.*
West Virginia	
University of West Virginia	85
Other	
Four- (4) year college or university in the South	86
Two- (2) year college in South	87
North	
Cornell	88
Harvard	89
Princeton	90
U. S. Military Academy	91
Yale	92
Other	
Four- (4) year college or university in the North	93
Two- (2) year college in North	94
Mid-West	
Four- (4) year college or university in the Mid-West	95
Two- (2) year college in Mid-West	96
Far West	
U. S. Air Force Academy	97
Other	
Four- (4) year college or university in the Far West	98
Two- (2) year college in Far West	99
Foreign Countries	
Code all schools outside the United States as	00